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THE PASSING OF MALARIA.*

C. C. BASS, M. D.,
NEW ORLEANS.

From the Department of Medicine, Tulane University School of Medicine.

Malaria is one of the most widely distributed diseases of man. The malaria parasite has been a parasite of man so long that it is now, and no doubt has been since prehistoric times, an obligate parasite of man, and cannot be inoculated into any other animal.

Malaria is found widely distributed throughout all of the warm and low-lying parts of most of the countries within a zone surrounding the earth from about 60° North Latitude to 45° South Latitude. In a great many of the regions in which it is endemic, its prevalence is either stationary or may be on the increase. There is no considerable reduction in any large region or country except where civilization has advanced to a considerable extent. On the other hand, there are several countries, vast areas of which were formerly intensely malarious, from which the disease has practically or entirely disappeared at the present time.

In 1697, Morton, of London, wrote an accurate description of the malarial fevers which were then endemic in London, as well as all over England and Wales. In 1726, Sydenham gave a most complete description of intermittent fevers which were endemic over England and to some extent in Scotland. The medical literature of England indicates continued prevalence of malaria up to 75 or 100 years ago. Since that time there has been a rapid decline and finally practical disappearance of the disease 25 to 50 years ago. It is noteworthy that after the discovery of the manner in which malaria is transmitted by mosquitoes and the identification of the particular species that are capable of transmitting it, these mosquitoes have been found to be still prevalent, sometimes in large numbers, in parts of England, although malaria no longer exists. It is true that it was re-introduced during and following the war by the return of soldiers chiefly from the Balkans and Palestine. Notwithstanding the fact that considerable numbers of infected soldiers were distributed over England, little transmission took place. During 1919, 103 indigenous cases were notified in England; during 1920, 36 and during 1921, 12.

Mannaberg says, "At the beginning of the nineteenth century Holland showed an endemnicity that stood qualitatively and quantitatively scarcely behind that of the notoriously malarious Agra Romana." Today the disease is limited to a very small focus in which very few cases occur.

A hundred years ago, in southern France, the regions of Rochefort, the mouth of the Gironde, etc., were intensely malarious. Today the disease is practically unknown. In the regions of the Harz Mountains and Wurtemberg in Germany, malaria was once one of the most prevalent diseases. These regions are now practically free from the

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disease. Intensely malarious foci, where fatal cases frequently occurred in Austria-Hungary, have almost no malaria now and that of the mildest type. Deaths from malaria rarely occur.

Fifty to 100 years ago, when the Ohio Valley and the great West were being settled, malaria was very prevalent in the low-lying valleys in Minnesota and Michigan, especially around the Great Lakes, Wisconsin, Illinois and Indiana. It is very rarely met with now in these regions. Farther south in Kentucky, Missouri, Tennessee and Oklahoma there are still some foci in which the disease prevails in a mild form to some extent. From 1800 to about 1850 the region around New York and Philadelphia, including the cities themselves, had a heavy malaria endemnicity. There were foci in which the disease was quite prevalent in Massachusetts and Connecticut, but the disease is no longer endemic in these regions. It is interesting in this connection, however, that when the infection was introduced in Connecticut recently by returning soldiers, it spread quite rapidly until checked by the control work of health agencies. This shows that the conditions for transmission still remained although the disease had long since disappeared.

Up to 20 years ago malaria was very prevalent in the region around Baltimore. The Johns Hopkins Hospital always had a good many cases in it during the warm season of the year. The writer recalls, very vividly, his first experience 22 years ago in microscopic study of malaria parasites in the blood in the out-patient department of the Johns Hopkins Hospital, where cases were to be found almost any time. Many of these cases came from in and around Baltimore. Very few cases are seen there now.

All of the more southern states of the United States were formerly intensely malarious. About the time of the Civil War, malaria was widespread all over the South and it was perhaps the largest single cause of death, there being a great deal of the various malignant types of the disease. Hemoglobinuria and the comatose forms were of frequent occurrence. In vast areas all the inhabitants were exposed and most of them expected to have their spells of chills and fever during the warm season of the year in the natural course of events. There was, however, the greatest variation in the prevalence and severity of the disease in different regions. The states of Arkansas, Alabama, Georgia, Mississippi, Louisiana and South Carolina suffered most.

There has been gradual but certain decline in the prevalence of malaria in the southern states for more than 50 years. Physicians who practised 40 or 50 years ago and people who are old enough to remember that far back recall the very wide prevalence of the disease at that time and the extent to which it incapacitated a large portion of the people during certain seasons of the year. A large part of the deaths that occurred in some of these region was due to malaria. Hemoglobinuria and so-called "congestive chills" were among the most common causes of death. The Mississippi Delta in Mississippi and Arkansas was notorious for the malignancy and wide prevalence of malaria. Everybody who lived there expected to have attacks and people who were considering emigration or travel to these regions hesitated, particularly on account of the well known prevalence and destructive effect of this disease. The state of Mississippi was one of the most malarious states and there is still considerable to be found in certain parts of the state. However, in other parts, where only a few years ago chills and fever were of the commonest occurrence, malaria is now almost entirely absent. Dr. Underwood, the State Health Officer of Mississippi, stated last week, in discussing a paper at the meeting of the Southern Medical Association, that the prevalence of malaria in Mississippi had

declined 52 per cent within the past 10 years. This probably represents about the rate of decline that has taken place in the other southern states. If this rate is maintained for another decade or two, malaria will become a negligible factor in the health of the people of these states.

Thirty or forty years ago, malaria was rife in New Orleans and in the surrounding area. Large numbers of cases were seen in the private practice of the physicians of the city and large numbers were also treated in the New Orleans Charity Hospital. During the summertime, it was perhaps the most frequent disease known in the wards of the hospital. I can recall that over 20 years ago there were always to be found several cases of malaria in each of the wards with which I was connected. I recall seeing as many as 16 quinine abscesses in the Charity Hospital at one time, less than 20 years ago. Even 10 years ago it was possible to find many cases of malaria in the hospital, especially during the summer and fall. This is one of the diseases of which we had the greatest abundance to show to our medical students and to visitors or others who were interested. At present the cases of malaria treated in the Charity Hospital are so few that the greatest difficulty is experienced in finding enough material with which to teach medical students and it is getting more scarce every year. Not only are there no cases originating in New Orleans because the disease is no longer endemic here, but very few cases are brought in from the surrounding country; indicating that the prevalence of malaria has declined in the country as well as in the city. A large proportion of the cases that are seen now are people who became infected in other countries, chiefly South and Central America, in most of which there has not yet been any considerable reduction in the prevalence of the disease. Most of the cases seen in New Orleans now are found in the United States Marine Hospital, where many of the patients are sailors and others who are exposed to infection in different parts of the world. The practising physicians of the city are seeing almost no cases in their private practice. Even those who limit their practice to consultation and see a great many patients from the surrounding country are finding it only very rarely. I think there is a general concensus of opinion to which all practitioners will agree that malaria is rapidly passing as an important disease of this country. It may be interesting to speculate and call attention to some of the factors that have contributed and are contributing to its elimination.

In the first place, the advancement of civilization is certainly an important factor. Whenever the forests are cleared and the land is drained for agricultural or industrial purposes, the tendency is for malaria to give way. It is true that the advance workers who develop such lands are usually badly effected, but as soon as development has progressed sufficiently malaria always gives way. This can be understood very well if one recalls the fact that the effective flight range over which Anopheles mosquitoes can transmit malaria is not more than about one mile. People who live more than a mile from mosquito breeding grounds are not likely to contract malaria. As the land is put into cultivation, the breeding ground is pushed back farther and out of range for more and more people. This is probably one of the important explanations for the decline in the prevalence of malaria in those countries or regions in which it declined long before the mode of transmission was known or even the cause of the disease itself, the malaria parasite.

Another factor that no doubt has contributed largely to the acceleration of the reduction in the prevalence of malaria in this country during the past 25 years has been the widespread knowledge of the fact that it is transmitted by mosquitoes and that protection against mosquitoes by

screens, mosquito nets, etc., also protects against the disease. Thirty years ago wire screens for homes were practically unknown. Now most of the homes in cities and many rural homes are screened. Bed nets or mosquito bars were formerly depended upon and these were probably less effective than screens. It is true that most of the screening has been done against the mosquito and the fly as a nuisance, more than against them as transmitters of disease.

Still another factor and one to which I wish especially to call attention is the more intelligent and more extensive use of quinine. Cinchona was introduced into Europe about 1640, but it was not extensively used until about the beginning of the 18th century. During the 18th century there was so much confusion about the diagnosis of malaria and cinchona bark was used in so many different and unsatisfactory ways that its effect was not as great as it was later, following the discovery of quinine in 1820 by Pelletier and Coventou. With quinine, the most important alkaloid of cinchona, in pure form, it was then possible to employ exact doses with far better results. The decline of the prevalence of malaria in all countries from which it has declined during modern times coincides almost exactly with the use of quinine in those countries. Malaria has not declined or decreased to any great extent in any country where quinine is not used extensively or properly. There are a great many countries, the Central American countries for example, in which the physicians administer quinine for malaria either intramuscularly or intravenously, but seldom by mouth. They also stop treatment as soon as their patients are relieved of clinical symptoms. In no country in which this is the practice has there been any appreciable decline in the prevalence of malaria except perhaps in small areas, as in Panama, where extensive anti-mosquito measures have been employed.

The use of quinine in the United States has no doubt been a most important factor in reducing the disease. A prosperous country and an enlightened people naturally use such remedies to best advantage. In all probability one of the important reasons that malaria has not disappeared from the South more rapidly, as it did further north, was because of the large negro population. One can readily understand that where there are a great many negroes who have malaria, they serve as malaria carriers and are sources of infection to their white neighbors. The inferior race would be much less likely to get quinine when they need it or to get sufficient to cure them of their infection so that they would not be carriers. There is a common belief among physicians practising in malarious countries where there are many negroes, that they will not continue to take the quinine after they have been relieved of their clinical symptoms. No doubt that is the case unless they are properly informed of the necessity for taking it after clinical symptoms are relieved. My own impression has been, however, that there is no difficulty to get them to take it if they are given the proper advice. They cooperate better than the lower class of white people.

The most rapid decline in the prevalence of malaria in the United States, by far, has taken place in the last ten years. There is not 50 per cent as much malaria in the United States today as there was 10 years ago. Intensive control operations of one kind or another have been undertaken in many places in the South during this time. In some of these places sanitation has been so perfect as completely to control Anopheline breeding and eliminate malaria entirely. The total area reached, however, by these intensive operations is insignificant when compared with the total area in which the disease prevails. If one granted even 100 per cent of control in all of these control areas it still would account for only

a small fraction of the reduction which has taken place all over the country.

About 10 years ago extensive educational propaganda was undertaken with the object of appealing to the practising physician particularly, throughout the South, more thoroughly to treat their malaria patients with special reference to cure of the infection after the clinical symptoms were relieved. A number of health agencies and workers in the cause formulated and promoted what is known as the Standard Treatment for Malaria, which is 10 grains of quinine sulphate by mouth three times daily for a period of three or four days to relieve the clinical symptoms, followed by 10 grains at night before retiring for a period of 8 weeks to cure the infection. This cures the infection in nearly all cases. Every malaria sufferer cured of his infection is one less source of infection to others. The standard treatment or other effective methods have been employed very extensively by the practicing physicians of the South. A large part of the patients who are treated by physicians now not only get treatment which relieves them of their active symptoms, but they get treatment which in most instances cures their infection. Naturally, this cutting down of the sources of infection year by year must have a marked effect, and it has had. There has been no equal period during the history of this country in which malaria has declined anything like as rapidly as during the past 10 years. I feel very confident that the use of quinine in an effective way has been an important contributing factor.

In conclusion, there can be no doubt but that malaria is rapidly passing as an important disease of this country. At the present rate, within another decade or two it will be a negligible disease except perhaps in certain very limited areas where special circumstances may result in its remaining for a longer time.

DISCUSSION.

Dr. F. M. Johns (New Orleans) The Standard Treatment for Malaria, proposed and advocated by the National Malaria Committee, headed by Dr. Bass, some years ago, may be considered as probably the greatest single factor contributing to the downfall of malaria in this country.

It is not my intention to discuss the numerous reasons for the "Passing of Malaria," for the statement of one who has contributed so largely as Dr. Bass has to this result could hardly be enlarged upon. I would like, however, to illustrate from my own personal observations the comparative drop in malaria incidence in our community.

Fourteen or fifteen years ago the finding of new cases of malaria, as shown by blood examination, was a matter of daily record in our student laboratories obtaining material from the state Charity Hospital at New Orleans. A dozen or more active cases were on the wards at all times. In private practice hardly a week passed without a positive diagnosis, and these were especially abundant in the fall among persons returning from summer vacations, many of the same patients again relapsing in the spring of the following year.

In the past few years our medical students have had great difficulty in finding enough cases of malaria to fulfill the requirements of the laboratory courses. In 1925, were it not that we had the active assistance of the House Medical Officer, Dr. P. H. Jones, our students would hardly have had enough malaria smears to go around the classes.

In private laboratory diagnostic work, for 1925, my records show the following interesting figures:

Patients examined for malaria by microscope	259
Patients showing malaria parasites	1
Patients subsequently relapsing (no parasites found at time of examination)	2

Of these patients, 52 came from cities the size of Shreveport, New Orleans, Mobile, Jackson or Biloxi, while 207 were from communities in which active transmission of malaria could be expected.

The one case of malaria found was in a patient just returned from a long residence in Guatemala, and whose first examination had failed to reveal parasites. The other relapse case waited until he was sent to Colorado for a lung lesion, and whose permanent residence was in Bay St. Louis, Mississippi.

It might strike some one that my cases were all either "well" people or that malaria was overlooked. In answer to this, the records show 69 patients were actually ill with symptoms strongly suggestive of acute malaria. A long experience

in searching for and the finding of many cases of real malaria has convinced me that malaria can be demonstrated in nearly every case presenting fever, and I am satisfied that the requirements of *stain* and *time* spent on smears were fairly fulfilled. Personally, I now class malaria in this community with such rare diseases as trichinosis, which had a slightly higher incidence upon my record.

Dr. Chaille Jamison (New Orleans): I think a great many of you will remember, as well as I do, that sixteen years ago, as intern at Charity, we passed the evenings when we had to stay in the hospital examining patients for malaria, and it was a common thing, as Dr. Johns has stated, to pick up two or three cases in each ward. At that time the negro wards were not without cases from along in March to well into November. Since my return from the war I have had perhaps two or three cases of malaria to demonstrate to the students in these same negro wards. This condition, to one who deals with medical cases, is even more strongly striking than to the one who does the experimental work. In private practice I have seen on an average of two cases a year. Neither of the cases that I recall having seen in the last six months originated in New Orleans; the one a country case, the other a gentleman who lives here, but spends a great deal of his time on the Mississippi River, and I have no doubt that this malaria was picked up in his excursions up and down the river. In the negro wards this summer we had two cases of comatose malaria; the organisms were demonstrated in the blood. Every case that comes into my wards has the blood examined, not once, but several times. The blood is examined in every instance, no matter what the disease. This is possible because the senior class takes the blood routinely as the patient comes in. We have had no case reported this year or last year from that source. I do not think we are missing very many cases by not "picking them up."

In the three years that I was with the City Board of Health there were about twelve cases that showed malaria plasmodia. It is my impression that there have been a few more cases of malaria in the last several months than in the past five years—this is but an impression, however, as I have no figures for verification.

Through Dr. Bass, malaria has been obliterated in our midst; we owe it to his propaganda, his work, and the interest he has aroused.

Dr. J. G. Dempsey (New Orleans): The reduction in number of cases of malaria, no doubt is due and credit should be given to the constant educational propaganda carried on for years through the journals and press. Of recent years it was my great pleasure to read many articles written by Dr. Bass.

In Louisiana and Mississippi 75% of the people upon a slight rise in temperature resort to self-medication—"the quinine bottle," which can be found in nearly every household.

I would like to ask if it has been established definitely when quinine should be taken, and if the laboratory findings are always negative when the blood is taken from a malaria patient within twenty-four hours after the administration of quinine? In diagnosing malaria from the laboratory standpoint we were taught some years ago that the plasmodia could not be found in any specimen taken within twenty-four hours after giving quinine.

Dr. J. A. Danna (New Orleans): In the old days it was only occasionally that the medical man called in the surgeon, and then only as a matter of unavoidable necessity. Now the pendulum has swung the other way, and especially since the war "passing the buck" has become a habit. Today if a patient presents a symptom of some kind indicating that surgical intervention might be necessary, the medical man immediately washes his hands of the case.

I am going to cite a case and ask for help. A very well known medical man (none stands higher) sent a man to Hotel Dieu with a small mass in the right iliac fossa which he said was tender, and he could not account for temperature which the patient had been running for two weeks. I examined the man and found that he had a lump, but not of an inflammatory nature, and not, in my opinion, responsible for his temperature. I did not do any surgery, but watched him and was often in consultation with the other doctor. I thought from his history it might be malaria and repeatedly had his blood examined for plasmodia, with negative results. The pathologist, Dr. Couret, said he did not expect to find plasmodia because he had had a dose of quinine a few days before. I finally gave him quinine, but he died 36 hours later. Autopsy showed all evidence of malaria, including plasmodia in the spleen pulp and cardiac blood.

Is there not some way of the laboratory man's helping us make a diagnosis in a case of this kind? The patient, unfortunately, had a couple of doses of quinine when he first took sick and because of this the laboratory man could not find any plasmodia. Is there not some way that we can find out and give the patient the right kind of treatment?

The lump happened to be another very serious condition from which he finally would have died: lymphosarcoma of the internal iliac gland.

Dr. C. C. Bass (closing): I think that an experience like that related by Dr. Johns is very significant. For a man who is as capable of discovering malaria parasites in blood as Dr. Johns is, to find only one case in several hundred patients from many different parts of the country, shows that there could be no other explanation than that there has been great reduction in the prevalence of malaria. The experience related by Dr. Jamison of seeing so few cases of malaria in his very large hospital experience coincides with that of all the other physiciaans here and serves to impress us with the very great decline in the prevalence of malaria during the last ten or fifteen years.

In answer to the question raised as to the effect or influence of taking quinine on the accuracy or dependability of microscopic examination, I would explain that quinine frequently causes rapid disappearance of malaria parasites from the circulating blood. As a result negative findings may be reported in patients who have malaria. It should be understood, however, that the symptoms of fever or chills and fever disappear more quickly than do the parasites and that patients who have no parasites in their blood have no clinical symptoms of malaria. The parasites disappear more quickly in one individual than another as the result of administration of quinine, but this should not prevent the examination of the blood in all cases in which malaria is suspected. If parasites are found, the diagnosis is made definite and if they are not, there is still some uncertainty. In practice one should always collect a specimen of blood when he first sees the patient, for examination either immediately or subsequently. This should be done regardless of whether the patient has taken quinine and without any relation to the occurrence of paroxysms.

In conclusion, I want again to emphasize the fact that the rapid decline in the prevalence of malaria in this country is largely due not only to the use of quinine but to the *proper use* of quinine. According to the information I have, there is probably no country in the world where quinine is used to as good advantage and where there is as little misuse of it in the treatment of malaria as in this country. Unnecessary hypodermic or intravenous administration of the drug is limited to the work of a comparatively small number of enthusiasts and the unreasonably excessive doses are also not used by a great many physicians. The standard treatment, which is effective in most cases, is extensively used throughout the whole country, and as I have said, has contributed largely to the very rapid decline in the prevalence of the disease.

THE OPERATION OF THE SHEPPARD-TOWNER ACT IN LOUISIANA.*

OSCAR DOWLING, M. D.,
NEW ORLEANS.

In the report of the Children's Bureau for the year ending June 30, 1924, it is stated, "On the face of the figures, the maternal mortality from all causes has been increasing in the United States, and the rate, in this country, is higher than in most foreign countries for which statistics are available. The (general) infant mortality rate dropped 10 points in 1921, but, in spite of this decline, eight other countries still have lower infant death rates than the United States.

Few people, I am sure, other than physicians and statisticians, realize that an enormous number of women are lost every year through preventable complications of childbirth. These are called obstetrical deaths and result from a variety of conditions and factors.

This loss of life among the mothers, and potential mothers, during their productive years—*i. e.*, between 20-40—has been recently a subject of concern in every civilized country. In these countries where the disturbances are short, and clinical facilities are good, the mortality is correspondingly lower, than where unfavorable conditions prevail. In our own country, with vast spaces, scarcely traversed by a railroad, the death rate is correspondingly high; for example, in the northwestern section of the United States, and in the mountainous districts of the Southern States.

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*Read before Louisiana State Medical Meeting, Monroe, La., April 15-17, 1926.

Puerperal septicemia, as a disease, is above, and beyond all others, to be regarded as a cause of death, and, if the facts were discoverable in each case, there is no doubt where the blame would rest.

Diseases, other than puerperal infection, swell the list of maternal deaths. Among the most prominent are albuminuria and eclampsia. The latter disease ranks next to puerperal fever in importance, in the ratio of about one to one and a half. Hemorrhage, accidents to pregnant women, and malpositions play important parts in the mortality statistics as well.

Not to tire you with figures, the situation shows that over 18,000 women are known to die annually of diseases, either directly, or indirectly, connected with childbirth, and that this is but a portion of those actually sacrificed. I should think that this figure might be increased by one-third, say, to 24,000 annually. This is a great price to pay for ignorance and indifference, and to diminish this mortality is a gigantic task.

It should not be forgotten, that, while the parturient woman is fulfilling her destiny, and paying the supreme price, the infantile deaths are keeping pace. The greatest mortality is during the first year—a high percentage during the first month; and these deaths are due to disease and accidents of birth, from which both mother and child suffer.

There are born alive each year in the United States approximately 2,620,000 babies. Of this number, about 199,000 die, before they are a year old. Early infant mortality accounts for approximately 100,000 of these deaths. To this number must be added an almost equal number of stillbirths (which our vital statistics overlook). "Early infant deaths and stillbirths exceed in number deaths from tuberculosis, and from all of the infectious diseases combined, except influenza and pneumonia." (Dublin, 1922.)

The enormous unnecessary loss of mothers and babies led to the organization of groups of obstetricians, gynecologists, pediatricians and other men and women, convinced that the prevention and control of the illness and death of mother and child were possible. The conviction grew, supported by the experience particularly of England and Australia, and it was this movement which culminated in the passage of the Maternity and Infancy Act, better known as the Sheppard-Towner Act.

States, in every section, hastened to accept. By June 30, 1925, forty-three states, and Hawaii, were co-operating with the Children's Bureau, in applying the provisions of the Act. Louisiana accepted July 9, 1924, and the work began September 1, 1924, almost two years after programs had become effective in many other states.

Our need in Louisiana for instruction of mothers and for better care of infants, and of prospective mothers, is clearly shown by our statistics, which are correct, as to deaths, and not far from correct as to births.

In 1923 we recorded 22,426 deaths; the death rate was 12.1 per 1,000 population. The births numbered 42,120; the birth rate was 22.7 per 1,000 population. Four hundred and five deaths were from puerperal causes, a death rate from this cause of 9.6 per 1,000 live births. Deaths under one year numbered 3,467, giving an infant mortality rate of 82.3 per 1,000 live births. In other words, 9.6 women died for every one thousand live births, and, of every 1,000 babies born alive, 82.3 died in the first year of life.

In 1924, the death rate was 13.3 per 1,000 population; the birth rate 23.1; the maternal death rate was 10.2 (per 1,000 live births); the infant mortality rate 93.6 (per 1,000 live births).

In 1925 the death rate was 13.2 (per 1,000 population); the birth rate 22.03.

The maternal death rate 11 (per 1,000 live births); the infant mortality rate 91.1 (per 1,000 live births).

You will note we had fewer births recorded in 1925, than in 1924, and a lower infant mortality rate.

The estimated maternal mortality of the United States, for 1923, was 8; sepsis accounted for 22.8 of this figure (Dr. Ralph Lobenstine). In Louisiana our rate was 9.6; we can not say how many were due to sepsis.

However, as a side light on the possibilities for sepsis, and other causes, of maternal deaths, in 1925, 46% of women in childbirth were attended by white physicians; 9.3% by colored doctors, while 44% were attended by midwives (62% of the latter, by colored midwives). The large number of women who, because of circumstances or otherwise, are attended by colored women who practice midwifery, is evident. Even with the best of training, these intermediaries in the most important and dangerous emergency of a woman's life, have not the knowledge, or, above all, the "aseptic instinct" of a trained physician, or, even of a third year medical student. They do, probably, the best they know how, and oftentimes, assisted by nature, there are no bad effects.

In those states co-operating the Children's Bureau suggests the fundamentals of a comprehensive program, and advises that these activities be undertaken, if desirable, according to conditions in the state. These lines of work mentioned are needed, more or less, in every state. They are:

1. Continued education, to develop public appreciation of the value of prenatal, confinement and infant care.

2. Stimulation of complete and early registration of births.

3. Deve'opment and extension of facilities for reaching areas where no maternity and infancy work is now done.

4. Establishment of permanent health conferences for prenatal, postnatal, and preschool consultations.

5. Establishment and maintenance of community public health nursing service and of follow-up work after health consultations.

The holding of classes and demonstrations for midwives; dental examinations of the school children of the lower grades, and organization of Mothers' and Little Mothers' classes, come within the scope of the program.

The work has been more than acceptable. Many communities are on the waiting list. In the fifteen months of operation (Sept. 1, 1924—Dec. 31, 1925) fifty-one visits were made to parishes in the interest of the reporting of more complete and accurate birth certificates. On these visits 310 local registrars and 361 physicians were interviewed; 250 (additional) birth certificates were sent to the office and over 1,000 mothers were instructed as to the need for birth registration. To instruct and locate midwives, twenty-four parishes were visited, 117 demonstrations given and 834 midwives interviewed; 1,241 midwives attended classes and 171 were assisted in getting bags and other equipment.

In 1925, 144 consultations or conferences were held of infants and children of the preschool age—the total number being 11,012—8,300 of whom, showed defects. Mothers conferences and meetings were held—number attending these being 4,310. Forty-eight dental clinics were held in this period, with examination of 6,156 children. In these clinics only emergency treatments are given, that is, very bad teeth are extracted, teeth are cleand and acute conditions remedied.

The work of the portable laboratory in examination of milk samples, in co-operation with the dairy divison, and in the examination of specimens for parasitical dis-

eases, was very satisfactory, and it is hoped that, a nutrition campaign in rural sections may be carried out during the summer by means of the traveling laboratories.

Pre-natal instruction has been given at the request of individual prospective mothers or public health nurses and at the baby conferences, if acceptable to those present. A correspondence course seems to meet the desire of a number of women. In response to this, 1227 letters have been sent, as well as pamphlets on pre-natal and infant care. We have six different pamphlets on subjects relating to pre-natal, infant and child care; 25,175 of these were distributed during the fifteen months.

One of the important features of the work has been distribution of silver nitrate solution for use in the eyes of newly born. This has been a legal requirement since 1912, but it seems not to have been generally used by midwives, either through ignorance or because they were unaware of the supply furnished, without cost, by the State Board.

Owing to the urgent demand of the public for examination of school children, the physician and nurses of the Infancy and Maternity divisions were given permission to do some school work in specific instances. When these programs are carried out, the parish or the community pays the expenses of the physician and nurse. These examinations proved educational, as to the need for examination of the younger grades, and for conferences with mothers, and have been the means of increasing the demand for the work. 23,776 school children were examined, and 21,624 were found defective. The defects were noted on slips and sent to the parents, and the conditions found, helped to convince parents that children should be made physicaly fit before they enter school. One of the main objectives of the summer program will be the examination of the children who will enter school in the fall.

The prevalence of certain defects is quite startling among the school children. Teeth are mainly involved. 15,919 instances of bad teeth were found among 79,795 other defects. Enlarged tonsils rank second, with 13,378 cases. Then, in order, follow nutrition defects, enlarged glands and adenoids. Other defects are not so large in number as these five, though many are of greater, or equal importance. These figures are the result of fifteen months investigation, and probably represent a fair proportional average.

Among infants and children of the pre-school age, we find that glandular hypertrophy occupies the first place; throat affections come next; teeth third; adenoids fourth; while nutritional defects rank fifth.

The alteration, in relative frequency of these five important defects, for two periods of childhood, is, perhaps, not without significance. For instance, the shifting of bad teeth from the third, to the first place in the school age, indicates, that parents are either unaware of or indifferent to this trouble, or that the teeth themselves, by virtue of hereditary weakness, are not able to meet the demands put upon them.

Tonsillar enlargement does not play such a prominent part among small children and infants, as it does among those who have begun to attend school.

Nutrition is third in point of frequence among school children, and fifth among infants and pre-school children. The work of the school, the early hours, the hasty breakfast and, very likely, the cold lunch, are doubtless mainly contributory.

Enlarged glands, meaning hypertrophied lymph nodes, rank fourth in the school child, and first among children of the pre-school age. The explanation may be that older children have acquired immunity to the organisms which cause the adenitis,

and that the glands have returned to normal.

Last, of these five prominent defects, is adenoid hypertrophy. It occupies the fifth place among school child defects, and fourth among those of the preschool child. This seems to indicate that the difficulty develops and persists, becoming only a litt'e more evident because the symptoms are pronounced and can easily be noted.

With these bona fide records, it is self-evident that this service benefits the two classes of individual factors in our civic life, who stand in greatest need of medical advice and instruction. On the one hand, we have the expectant mother and the mother after she has passed through her ordeal; on the other, the child from the time he enters the world up to and after the ending school life.

You and I are aware of how little has been done in prenatal work. We are also aware of the many difficulties in getting over to the expectant mother the instruction that will aid her and perhaps save her life and the life of her baby. Where this work is organized, it is not only the mothers of the cities and towns who receive instruction but those also of the rural regions. Emphasis is laid upon the fact that the prospective mother should have the counsel and assistance of her own medical adviser—her family physician. Effort is made to impress upon her the need for intelligent, trained obstetrical care. If, from necessity, she must have a midwife, she should know of the qualities of a safe midwife; she should know that if any abnormal situation arises, the midwife cannot give relief and should not attempt it, but a physician should be called at once. Happily, in many instances, the baby is given the food that Nature intended, but, if for any reason it should not be possible for the mother to nurse her own baby, she should know it is absolutely imperative that a physician be asked to prescribe the exact formula for the baby's feeding. She should know something of the care that must be exercised in cleanliness when artificial food is given and the signs by which she can tell whether her baby is well nourished or not. Some medical advice is necessary even for babies that are breast fed and the mother should be taught signs of malnutrition or lack of proper weight, or any condition which is not normal.

There are about 2,000 midwives in the State of Louisiana and many of these should have specific training in the simplest principles of asepsis; they should know the consequences of foolish practices or methods, which mean a great risk to mother and child. It is within the power of an intelligent force to get the good will of the midwife and to have her appreciate the lessons and demonstrations that are offered. We know this to be true because of the experience in four parishes where intensive work has been accomplished.

Referring to the children, many of whom are beneficiaries of this work, it is cruel to expect a defective child to keep up with his class; it goes without saying, also, that, if he is made to feel his inferiority without realizing that it is because of a physical defect, it will react upon him mentally. In fact, it is known that what is called the "inferiority complex," which prevails among many defective children, is due to the teacher's, parents' or his own lack of knowledge of his own physical condition.

On the economic side, for the State and the community, the defective child is a great expense to the school authorities; if he is a repeater or even slow he is an expense. Our school authorities know this and welcome whatever can be done to make the children physically fit. Our juvenile courts find that a large number of the children who are brought before them belong in the class of the defective. We spend untold amounts on the courts, houses of detention, reform schools and other institutions of like character, to correct what we call

moral and mental defects, many of which have their origin in the unsound physical body.

It is greatly to the credit of the legislatures of the states and their health departments that nearly every state in the Union has acknowledged that the conditions which exist call for systematic, organized, intensive work along the lines suggested by the Children's Bureau in Washington. It is recognized that, ultimately, all health work will be financed and directed by the local and State authorities, and I think it is quite true that wherever health work is successfully done, the community is convinced of its beneficial influence, and, likewise, the community is convinced of the economy of spending money for prevention rather than cure.

In the operation of the Bureau of Child Hygiene, and especially in the division given over to Infancy and Maternity work, the co-operation of the Parish Unit has been most helpful and satisfactory. Five of these Units were assisted by funds from the division. All are interested in every aspect of child health. They send reports monthly to the Bureau of Child Hygiene of the Louisiana State Board of Health of their activities in these phases of health work.

DISCUSSION.

Dr. E. S. Matthews (Bunkie): The startling statement made by Dr. Dowling that the maternal mortality in this country is greater than in any other country from which he has statistics, and that it is twice as large as it is in England and Wales, and secondly, that the infant mortality in this country is 100,000 a year for those who die in the early stages of infancy, is a question that certainly should arouse us to a serious problem.

The first question that comes to my mind is, why is this? They say that we are the most enlightened nation under the sun, that we are the richest nation under the sun, that education with all of its advantages can be had from the Lakes to the Gulf and from coast to coast. I will not attempt to answer this question but would rather anticipate its answer in the future under a new administration of affairs.

In 1921 the Sheppard-Towner bill was passed by Congress, which was an act granting a certain amount of money to each state that would put up an equal amount of money for the purpose of educating prospective mothers in the proper manner of caring for infants in their early age. I am glad to tell you that this act was promulgated by Senator Gilbert of this state and passed the Legislature in 1924. Since that time it has been operative in this State, according to Dr. Dowling. I am sure that it meets the approval of every one here and we are all anxious to see that it is properly carried out.

Louisiana received in 1925, $17,000, which was duplicated by the state and the promulgation of the act became operative and the education of the women of this state was attempted. Recently it was my good fortune to have the corps of nurses and doctors from the State Board of Health in my town and parish and already I notice improvement, particularly among the midwives. It is a pleasure for me to announce that the midwives who formerly came to me with ordinary clothes, come with their satchels, white caps and white gowns, and they have been taught so well by the two doctors named by Dr. Dowling, the nurse and doctor, that it is a pleasure to be with them.

We spend so much money on other subjects—the breeding of stock in agriculture, the advancement of science for material welfare and happiness, that it seems this $34,000 we are spending now is just a drop in the bucket. We should preserve by every known means as physicians, by every personal act, by every act of education, legislation and everything else, the lives of those who are dearest to us, those lovable lives, those beautiful lives, the mothers and the babies.

Dr. H. R. Unsworth (New Orleans): It seems to me that the wrong impression is being given about the midwives. I believe there are a lot of physicians who have been well educated in their particular line who turn out to be incompetent obstetricians, and I don't see how it is possible to expect a midwife to be a competent obstetrician. I believe we can go a long way toward reducing our infant mortality by eliminating if possible the practice of midwifery. Not that they are malicious in what they do but that they are ignorant. Instead of fostering a feeling of uplifting the midwives and increasing the midwives, I believe it would be far better to try to find some means to eliminate the midwife and thereby I feel that infant mortality and mother mortality might be in turn reduced.

It is true that midwives in a physical way have improved. Midwives intellectually and obstetrically cannot improve because they are fundamentally ignorant of obstetrics. I think Louisiana would make a terrific stride forward if there was some law of legislature to prohibit midwives from practicing obstetrics. As far as assisting the doctor I consider that they are a very remarkable assistance, but as far as active delivery is concerned, I think it is a mistake to advocate midwifery in obstetrics in any state when it is possible to have a physician.

Dr. J. S. Branch (Alco): I just want to add a few words to what Dr. Unsworth has said as to the question of getting rid of midwives. I don't believe you could any more do that than you could divert the waters of the Mississippi River. It is an utter impossibility to be rid of midwives. Therefore, the only thing we can do is to educate them, and make them do more efficient work.

Dr. Wallace J. Durel (New Orleans). I am certainly delighted to hear the good report that Dr. Dowling has given us and I feel that Dr. Dowling is to be complimented on this part of his work. When this bill was first proposed to us I was dubious in the matter but evidently Dr. Dowling through his management and supervision has brought the bill out to good effect.

The latter part of Dr. Dowling's statement I want to take up, relative to the help that should be given by the public, by the profession at large, not only to the young child but also in the prevention of other conditions, infectious conditions. The official organization, that is, the Board of Health, no doubt has its specific duties to perform. Besides we have the non-official organizations such as the Child Welfare, which no doubt had started such work even before the Board of Health tried to do it. And those wonderful ladies who have organized the child welfare should be encouraged.

The organization that was founded practically by our good Chairman here certainly should be given the strong support of every citizen in Louisiana, not only financially but morally. I must say that since the organization of the Tuberculosis and Public Health Service I have seen one thing I have been trying to see for years—a greater interest displayed by the medical profession in health work and in tuberculosis.

As Dr. Dowling has stated, in the example where the doctor did not wash his hands and he was checked by a board of health representative, I must say it is a sad reflection on the medical profession if the medical profession has to be educated by the board of health. Let's close our medical colleges; let's do something else. But, thank God, it is going to be this way: these things that are happening are going to stimulate members of medical colleges to a better education in that line of work to their students, and I want to congratulate Dr. Dowling again on his achievement.

Dr. R. W. Seay (Local Registrar, La. State Board Health, Millikin): I would like to say a little about a thing that I believe will be of great benefit to the State of Louisiana. As Local Registrar for some years I have gone to great exertion in order to take the registrations. I have gone before the police jury while in session, the grand jury while in session, and the district attorney, and begged them to carry out the law in having these people prosecuted who do not send in their registrations. I believe that if the district attorney and the police juries will arrest a few of the people in different parts of the parish who are not fulfilling their duties, when they are so derelict that they neglect to send in registrations, it will be of great benefit to the state and we will get our registrations.

They will not send them in. Sometimes they are almost a year behind and I have to spend days and days in going and hunting each individuation in order to try and get the information. I have been trying to get these for the state and have done a great deal of extra work, doing sometimes as much as three days' work at one time, going into adjoining wards in order to get those that could not be obtained because the people did not care. They were not prosecuted. There has never been a prosecution in the parish yet and I believe there will be immense advantage if some of the people are prosecuted and brought in and made to realize that they can't neglect their duties and still go free.

Dr. Thos. E. Wright (Monroe): Since the operation of this new law in Louisiana, undoubtedly a great deal of good has been accomplished, and yet we are just at the beginning, or the starting point. From Dr. Dowling's paper and with what little information we may have on the side, it occurs to me that we have about three chief elements with which to deal in this particular work.

The first one is the prenatal care. Some women, expectant mothers, are so entirely ignorant of what may be expected of them, of the coming trials and multiplied details they are to meet within the next few months, their own care of themselves, environment, etc., this one item alone,—ignorance on the part of the mother, is responsible for the loss of many babies.

The State Board of Health is particularly anxious to send out to every expectant mother through the mail all of the literature which is the best obtainable for her to read. In this parish, where we have our health unit and where our director is helping and encouraging our public health nurse, at intervals of two or three or four weeks this nurse calls on the different doctors who are available and asks them to give her a list of their expectant mothers and she will take to them in their homes all the literature they need.

That is easy. That woman becomes intelligently informed and correctly informed about what may be expected of her and what she may expect to happen to her. That is one.

Now the matter of the second period, which is the matter of confinement itself. I won't have to touch upon the doctors but we have a problem we must meet in this state and that is the problem of the midwife. One of the doctors struck a keynote when he said we must keep them yet we must educate them as much as possible so that they will handle more skillfully, if we might speak of it in that way, the cases under their care.

We have, as an illustration, in this Parish of Ouachita, about seventy-eight midwives. None of them are licensed. It is impossible for any of these to be licensed because none of them can read or write sufficiently to take a written examination. They have a place in the practice of medicine; they have their niche or corner somewhere in this particular civilization we call Ouachita Parish, a part and parcel of its existence. I am glad that they are here and that they are working, although they are working against the law as it stands because what they do is illegal. We could prosecute but we don't want to do that. There are many cases of confinement which doctors will not have time to attend and some woman would suffer. They fill their place.

Undoubtedly, unquestionably, either at the next meeting of the Legislature or some time in the future, the Louisiana law governing the control of midwives is bound to be modified so that a reasonably competent colored woman who knows the principles of cleanliness and asepsis, who has her own equipment, etc., who knows how to keep clean, uses good judgment and common sense, may deliver a woman skillfully so far as the midwife's work is concerned, even though she may not be able to read or write. They have their place and we must recognize and appreciate it and we must help them by educating them.

To do that properly we must weed out the most undesirable ones, the ones who can't see well enough and the ones who do not follow established lines of procedure. As it stands now we have to accept all of them or weed them all out. This problem undoubtedly will adjust itself.

In the matter of infant care, again where your public health nurse is working (and I hope to see the time when every parish in the state will have one even if she has to be called the school nurse) she can do much. So many sick babies are so due to the ignorance of the mothers who feed them improper food, or too much, or give them bad milk where even the bottles and the rubber nipples are scalded possibly once in a week. No wonder the infant mortality rate is so high. And now to summarize:

Through the instrument of your public health nurse, and as I said she must be utilized sometime or other in every parish, your infant mortality can be decreased markedly through education of your mother about herself previous to confinement. The next serious point of attack is the skillful management and training of your midwife depending upon the medical profession to do its part in educating the midwives along lines of general safety. Last is the postnatal care of your infants.

This subject has a much larger scope than I have outlined. I mention these three as leading points. This work will go into the schools and pick up the defective children and pretty soon you see the eye, ear, nose and throat men taking care of them, eyesight corrected and hook worm disease treated, many other defects corrected and the children put on a more stable basis for learning to be future citizens.

We can't do anything else, certainly, but approve the work that has been done not only in Louisiana but every state where this law is effective.

Dr. R. McG. Carruth (New Roads): I have spoken so often on this subject before medical bodies and before mothers' meetings and baby health campaigns and medical men in various districts, especially in my own parish, our little parish society meetings, that honestly I have almost become weary of the sound of my own voice. And did I not believe it to be possibly a subject the most important that could be discussed in any medical body or in any community club meeting of the mothers of the state, I would not rise now to say one word, because the hour is late and I feel that I ought not to impose upon your time.

I have not done a large obstetrical work but in the forty-five years of my practice in the country I must have seen a great many of these cases. Very early in my professional life my attention was called to the fact of the gross incompetence of the average midwife, not only on the large plantations that did the work mostly for negroes, but of the midwives that were called into our best white families because there were no others to be had.

Time and again have I seen old women, supposed to be capable on account of their very decrepit condition, showing the long experience they had had, with ankylosed finger joints, long finger nails crooked at the end from diseased bone felons, and other things upon those poor old crooked fingers, seventy-five years of age, attempting to attend to a little baby just come into this world, when there stood by the mother, the grandmother or the aunt or the married sister or other lady friends afraid to take hold of the child.

How often have I taken that old grandmother or the aunt aside and given her a heart to heart talk! "You think this old woman knows more than you do simply because she has been at this business for so long a time. If you don't know anything about it, in God's name it is time you should learn something about it."

I have known a case where child after child of some old midwife died within a few days after birth until I had to go to her and tell her, "Don't you confine another case for three months," and I made her come to my office and gave her instruction. I am perfectly certain the deaths were due to the contagion she carried around. I examined her fingers and explained to her there were enough poison germs to destroy the world under the finger nails. I tried to explain to her the importance not only of washing with ordinary soap and boiled water, but of using disinfectant soap and a rough scrubbing brush and even then that she ought to have a pair of gloves, though of course I knew it was impossible to get her to handle them in the proper way.

We should not stop with educating the old midwives. Gentlemen, the time has not come and may not come for years when we can do without the old plantation midwife. What are we going to do? Not long ago an old woman was arrested and put under bond in my parish for something she had done or something she was supposed to have done. I went to the doctor and I had a heart to heart talk with him. I went to the old woman. I went to the judge and I had the charge dismissed with the doctor's consent. I told the planter on whose plantation this woman lived and who had very kindly gone her bond that this old woman was an average midwife. She had done good work that I knew from my own observation because she had been with me in my cases. I told him I had talked to her about the way she should handle these cases, more what she should not do than what she should do. I told that overseer, that planter, that it wasn't his duty to stop that old woman, but that it was his duty, had that old woman not been there, had there been no woman within reach, to go himself to help that poor woman. "It is your duty, man as you are, to go into that cabin on your place and help that poor creature in the throes of agony at such a critical time in her existence, in the name of God and the children of the land."

I have brought this matter before the people at their mass meetings, at their community gatherings, in baby campaigns, and in various other meetings of mothers' clubs. We should not only educate the old women but we should educate the mothers and the grandmothers and the aunts and the married sisters along this line. Until we have sufficient funds to provide a physician or a graduate midwife for every community throughout the land, it is up to us gentlemen and it is our fault if we do not at least preach the gospel of cleanliness. We are to blame. I am to blame for not having done even more than I feel I have done. We are all to blame for this condition and the sooner we recognize it and try to eradicate it the better it will be. One further word and I am through. The time for the preparation for confinement begins in the early weeks of gestation.

Dr. Dowling (in closing): It is very interesting that during 1925 forty per cent of babies reported, and we estimate ninety-eight per cent of them were recorded, were delivered by white physicians, nine per cent by colored physicians and the rest by midwives—sixty-two per cent of this number, however, were delivered by colored midwives.

The law provides that the midwives may practice in plantation emergencies, and if you want to stir up a community appear before the grand jury sometime and ask for an indictment of some old colored woman. You will probably find that one, two or three members of that grand jury know the woman—in fact she may have attended their wives at some period in their lives—and you will be far from getting that indictment.

As long as we have them with us and as long as they are going to take care of these cases, the Board of Health has felt it is its duty to see they are as cleanly as possible and that they helped in the proper way. I still indulge the

hope that the time is not far distant when we will have facilities for emergencies in hospitals, just as in British countries, where they have a minimum of ten beds with a staff to take care of these emergencies. They have ambulances to bring the cases in; they will not go out to take care of them. Also, at these places incipient tuberculosis can be diagnosed.

We want to make childbirth safe both for the mother and for the child in Louisiana.

FOREIGN BODIES OF THE INTESTINE.*

D. I. HIRSCH, M. D.,
MONROE, LA.

For the past few years, I have devoted considerable time to the study and classification of intestinal obstruction caused by foreign bodies. It was while making these investigations we were able by a process of elimination to classify and diagnose these cases. The symptoms found were not consistent and would not fit into any of the classifications we had made of intestinal obstruction; although our experiences are limited, we were able in the last few cases to make a diagnosis. It is indeed amazing, while perusing the literature, to see how badly the subject of intestinal obstruction is handled and with only a small reference to the cases with foreign bodies in the small intestine. Time does not permit, nor is it my intention to go into the subject of intestinal obstruction; were it possible for us to do so, it would make this paper more interesting. Foreign bodies in the small intestine constitutes a clinical entity as easily and definitely diagnosed as a gall stone or ureteral calculus. There is no doubt in my mind that the extreme abdominal discomfort seen so frequent in young boys after eating green fruit, is due to the fact that these fruit particles are undigested and act as a foreign body in the small intestine.

*Read before the Louisiana State Medical Society, Monroe, April 15-17, 1926.

The etiology in most cases is obvious: some are caused by parasites, gall stones, and tumors or polyps. A polyp may become detached from its pedicle and then becomes a foreign body, the most frequent result of polyps being intussusception which is caused by dragging on the pedicle. Fruit seeds, gall stones, etc., act as a nucleus collecting the fecal particles, which become saponified, thus forming an enterolith or corpolith.

PATHOLOGY.

As long as the foreign body does not cause obstruction or is dormant, you would have very little change in the gut other than a narrowing of the lumen on either side. This condition was found twice by me. Whenever the foreign body causes obstruction, then the pathology of obstruction, acute or chronic, would be expected. Cases of intussusception in adults are caused by tumors or polyps in the majority of instances, although we have never observed this in our experiences. In all of our cases, the seat of trouble seemed to be in the list eighteen inches of the ileum.

SYMPTOMS.

The usual onset in these cases is a severe abdominal pain, generally around the umbilicus. It is very severe, not constant, each pain corresponding to the peristaltic wave; at each peristalsis, there is a recurrence of the pain, causing the patient to cry out, also flex the legs upon the abdomen in order to get relief. The pain is as severe as a pain of gall stone or kidney stone, but of shorter duration. These patients usually vomit early, the abdomen is flat, no rigidity, but there is a flatness on percussion over the foreign body which is very similar to the symptoms described by Dancy and found anywhere in the abdomen over the foreign body. There is also pain on pressure. I have never been able to palpate a foreign body, but in conversation with several of my confreres, I have received reports in which masses of round worms could be felt. You

will not find a complete obstruction in these cases until the foreign body becomes fixed or catches in the narrow parts of the gut, which is near the ileocecal valve. The pain is so severe that it becomes necessary to relieve these patients; a small dose of morphine will suffice, the pain returning as soon as the effects of the morphine has worn off. This is a very important point in the diagnosis, as the pain will return at a different point from which it was at the time the morphine was given, showing that the cause of the trouble has moved. After giving an enema, there may be a bowel movement; if repeated enemas are given, the water soon returns clear, which is very important. There is not much distention, as there is seldom a complete obstruction. The gases pass on and are expelled, leaving the abdomen flat. Early in these cases, there is no rigidity, but tenderness on pressure over the foreign body.

DIAGNOSIS.

The first impression one gets is that he is dealing with an acute surgical abdomen. The disappointment is keen when, upon palpating an abdomen, you find no rigidity, no distention, and none of the objective symptoms of an acute abdomen. The temperature and the pulse are normal, the patient has an uneasy expression, the forehead and face are moist. In a few moments the pain subsides, only to return again with renewed force, causing the patient to cry out, and, to use an ordinary expression, bend double to get relief. The patient may give a history of having vomited or may vomit while under observation. The laboratory is of no aid in the diagnosis of these cases, varying in two cases from a normal to a leucocyte count of twenty-five thousand. X-ray may be a valuable aid in the diagnosis. To summarize, the diagnosis is made from the following symptoms: sever or acute pain, no rigidity, no distention, no temperature, vomiting and obstipation; the similarity of these cases to the cases of gall stone and kidney stone is very marked, the only difference being in the location of the pain.

Case 1: The patient, F. K., male, age twenty-nine, well developed, plethoric individual; on October 2nd, was called to see this man who presented all symptoms of a renal colic, pain in the right flank radiating into the groin. He was given a hypodermic of morphine which relieved his pain. Subsequent examination, X-ray and laboratory failed to reveal any evidence of kidney stone. About two weeks after this attack, patient consulted me complaining of indigestion and constipation. He was advised to go to the hospital for examination; as he had planned a trip to New York, he asked a postponement and promised to return in November for his examination. Present trouble began November 8th, with severe pain in the epigastrium. He went to the drugstore and was given some pluto water; shortly afterwards was taken with violent pain in the upper abdomen, within an hour began vomiting, still complaining with severe intermittent pains in the epigastrium. Copious draughts of soda water were given and a large amount of clear yellow fluid was vomited. Patient still complaining of severe pain in the epigastrium, hypodermic one-eighth grain of morphine was given on the night of November 8th, which gave some relief. Several enemas were given without results. There was no distention, no rigidity, very slight pain on pressure and flatness of percussion. Thinking I was dealing with a condition similar to the previous attack, he was given a small dose of calomel in order to relieve the vomiting. At this time there was no temperature, no rigidity, and no pain, leucotype count 6500. On the afternoon of November 9th, some distention, some rigidity and vomiting of a stercoraceous nature. Diagnosis of intestinal obstruction was made and the patient brought to the hospital for operation. Upon opening the abdomen the obstruction was easily located. Two large masses were found about eight inches from the ileocecal valve, causing the obstruction; an incision was made into the gut and the cause removed, closure being made in the usual manner. Patient returned from the operation in good shape, pulse eighty-eight, temperature normal. The next morning showed no signs of distention, patient's condition very satisfactory. The following morning patient developed post-operative pneumonia and died on November 10th.

The following post mortem findings are reported: double pneumonia, which evidently caused patient's death. In the stomach was located a mass about the size of a baseball which corresponded with the ones found at operation. Intestinal Canal: There was no distention, site

of operation was healing by first intention, there being no evidence that death was due to operative interference. On examining masses removed from stomach and intestine, they were found to be composed of seeds from the persimmon, the two small ones were about the size of a golf ball, having the consistency and color of putty; upon breaking them, they were found to be composed of the seeds which were held together by a fiber which was evidently part of fruit, the larger one having the same consistency and appearance as the smaller. This is not as typical as the next two cases I shall report, and it is very doubtful if the diagnosis could have been made in this case before the obstruction took place. You will observe that it was forty-eight hours from the time of his first symptoms, until the diagnosis could be made.

Case 2: Seen in consultation with Dr. J. E. Walsworth. Following record taken from files of Dr. Walsworth.

R. S., white, male, age twenty-two, robust.

Family History. Irrelevant.

Social History: Truck driver for wholesale grocery house for the past two years, and accustomed to usual social life of such occupations.

Previous Medical History: Ordinary diseases of childhood, but no special complications or sickness. Has had abdominal distress at intervals for several months, but of no special significance.

Present Illness: While camping out on hunting trip, patient was caught in rain-storm; on home car was stuck and in trying to get it out of mud, patient strained himself considerably; noticed abdominal pain and broke out in cold sweat. After a rest, felt better and returned home. Pain continued at intervals, rhythmical in character, more severe spasmodically; ate big dinner, fried corn forming a bulk of the meal. Bowels moved several times, cramping pain continued. Began vomiting about 3 p. m., felt better. Dose of salts, oil. About 9 and 11 p. m. began vomiting, pain severe in abdomen, rhythmical in character, cramps, no pain in intervals, no sleep; has developed fresh cold (had grippe ten days ago but had recuperated). 9 a. m. case was seen.

General Physical Condition: White, male youth, well nourished and developed, height about 5 ft. and 8 in. and weighing approximately 170 lbs.

Physical examination: Local: In going over history, we felt that a careful interpretation of clinical findings referring to the abdomen and chest were sufficient to concentrate our attention as suggested by record.

Chest: Cardio-vascular system.

Heart: Apex located within left 5th interspace just within mid-clavicular line and while the action was accelerated to about 120 per minute there were no other findings of significance.

Lungs: Regardless of fact of history of grippe few days ago and fresh cold night before, lungs were negative to inspection, palpation, percussion and auscultation.

Abdomen: Inspection revealed normal contour. Auscultation elicits audible splashing sounds of gas occasionally, and associated with rhythmical pains—very well generalized over the upper abdomen.

Palpation: Reveals slight tenderness over entire abdomen with seeming exaggeration along right rectus—palpation prohibited during period of rhythmical pain—extreme sensitiveness at that time.

Laboratory Reports. Urine shows trace of albumin.

Blood: 14,500 with 85 per cent of neutrophiles.

Temperature: 98°.

Respiration: Normal in interval between pains—accelerated during pain.

Diagnosis by Induction from Clinical Data:

Thorough study of history of case, onset of illness, record of present illness, together with physical findings and their interpretations, led us to conclude that we were dealing with a surgical abdomen—the condition being most probably an enterolith type of intestinal obstruction and we therefore advised immediate surgical intervention.

Pre-operative Diagnosis: Intestinal obstruction—Enterolith.

Surgical Technique: Ordinary right rectus incision of usual type for appendectomy. Exploration revealed large, hard bolus in ileum about 8 inches proximal to ileocecal valve—bolus removed by small anti-mesenteric linear incision—wound closed by classical Connell and Lembert sutures—abdominal wound closed without drainage.

Post Operative Record: Patient returned to room in good condition, reacted nicely, but lungs became edematous within few hours, filling completely, the patient dying during the 36th post-operative hour from edema of the lungs.

Case 3: J. S.

Family History: Irrelevant.

Social History: Married man, clerk in store.

Past History. Patient states that he has had three attacks of appendicitis. Severe constipation, otherwise negative.

I was summoned to see a case of appendicitis; upon arriving at bedside found patient with severe pain in abdomen, near umbilicus; no rigidity, no tenderness at McBurney's point, no temperature and no history of having vomited. Upon inquiring, I learned that his case had been diagnosed appendicitis and immediate operation advised. Patient was admitted to hospital for observation. Leucocyte count 6500 with normal differential count. Pain of paroxysmal type very severe, causing sweating and nausea. At this time a diagnosis of foreign body was made and preparations for X-ray examination were made. As there was no indication for haste, we were very deliberate in our procedure. An enema of warm soap water was given, the patient expelling four hard fecal masses or corporliths, getting considerable relief. Hot applications were made to the abdomen and another enema given with the same results as above with one stone about the size of a marble, which I took for a gall stone. The patient was entirely relieved and left the hospital before any further examination could be made.

DISCUSSION.

Dr. J. E. Walsworth (Monroe): First, I want to thank Dr. Hirsch for asking me to discuss this paper, because it has been a great deal of pleasure to be associated with Dr. Hirsch in numbers of cases in Monroe.

In looking over the records of the hospitals here, there have been very few cases of this type treated in Monroe in the last few years. Monroe serves in surgical work a population of about 80,000 people, and in looking up the records of different hospitals I have noticed that we do in hospitals of Monroe more surgical work than numbers of towns of larger population. When we consider that we can appreciate the infrequency of this type of intestinal obstruction.

We don't mean the type caused by foreign bodies which we know the patient has taken, possibly a chicken bone or pin, because we have a diagnosis already made and we keep them under observation. Rather we are dealing with the case that comes up without any definite history, without any any knowledge of the patient's having eaten anything that could produce it. When we get a condition of that type, the patient usually does not appreciate the seriousness of his condition and one is called in and finds him suffering with those rhythmical pains that are characteristic of the condition, similar to the pains in those late cases of complete obstruction. Sometimes one can see the wave going around where you have the distention, but one gets this early, without any distention of the abdomen whatever. I would term that an intermittent obstruction. That is, it is obstructing one minute and possibly the next minute the gas and everything is expelled and the patient's bowels move.

The patient cannot appreciate the seriousness of his condition and one has to be very diplomatic with that part of it. When you find an abdomen of this type and with that history, it seems to me that you should stop, look and reason with yourself and with the patient, because your attitude from the beginning with that patient possibly means his life. You are going to have to be very conservative with him and diplomatic to get his co-operation.

We must remember the anatomy of the gastro-intestinal tract, the nerve supply, and then we must develop, as Dr. Mayo so well brought out the other day, the sixth sense of imagination and be able to interpret the condition by elimination and the full development of that sense. In looking over these cases and discussing the condition of those patients we must remember that we are usually called late; that is, the first physician is usually called late. The patient has been suffering considerably and has gone through a certain stage of exhaustion. When you get those pains that are brought on by these foreign bodies you can appreciate that there has been considerable exhaustion brought about by the intestine trying to force that through, and you may just as well consider a surgical treatment in a case of obstetrics for cesarean section that has already become exhausted as to consider surgical treatment in these conditions.

For that reason, with the record and experience that we have had, we have been a little bit suspicious about these conditions. There is another thing to consider in the treatment, and that is that we have an emergency, but the emergency has possibly already existed for some several hours and a little bit more time will not necessarily jeopardize the patient much more than has already been done.

Dr. C. P. Gray (Monroe): It is with quite a good deal of respect that I discuss a paper by my friend, Dr. Hirsch. I have quite a good deal of respect for his keen sense of diagnosis and I will take this occasion to compliment him on the diagnosis of a number of cases similar to the ones that he has reported.

I have had no personal experience that I know of, except one case, of foreign bodies in the bowel, producing symptoms of obstruction. That case, coupled with the interest that Dr. Hirsch has aroused in Monroe by the cases he

has come in contact with, leads me to say that as a whole, foreign bodies in the intestine and the obstruction produced thereby produce a set of symptoms different to those we find in almost any other condition.

I remember distinctly this case that I have in mind I diagnosed as an appendicitis. Afterwards looking back over it I could see where I was wrong because we get a discrepancy in the symptoms, vomiting, blood count and temperature. As Dr. Hirsch so well brought out, there is a peculiar flatness of the abdomen, I recall distinctly my case had that flatness. One or two other cases that I have seen since that time presented that same peculiar flatness.

To illustrate what I mean, it is similar to a race horse after running a race. If you stop the horse and observe his breathing you notice a flatness in the flank which is different to that existing when the horse is standing at ease or at rest. You find that a similar flatness occurs in these cases of foreign bodies.

Another thing, in regard to the pain, it is different from that we have in other conditions. As one patient described it, if his abdomen were twice the size of a normal abdomen the pain would cover that entire area. That is, it gives the impression that the abdomen is really larger than it is.

I think that Dr. Hirsch well brought out that the reason for this flatness in some of these cases or in the majority of them is that the obstruction is not complete. I remember well this case I speak of. The foreign body was a chicken bone one and three-fourths inches long. In this case there was free bowel movement because the obstruction was not complete.

As a whole I want to agree with the author of this paper. I think that he has devoted quite a good deal of time and study to a condition which has not been appreciated by the medical profession as a whole as it should be because it is almost a separate entity within itself.

Dr. J. Birney Guthrie (New Orleans): There is one word that I have been listening for in this very interesting discussion of foreign bodies in the intestine. The word is diverticulum. I think that when we have an obstruction in a tubular viscus above and below a certain point that we are sure to find a diverticulum. It is the only thing in the world that can explain what we have seen, the retention of collections of foreign bodies.

Several years ago I published a report on some cases of ascites, one of which went to autopsy, and we found three or four diverticula in continuity, holding the most extraordinary collection of junk that you can imagine, cherry pits, frog bones, etc. We had a great deal of trouble identifying the animal that the bones came from but they were frog bones, and pieces of the ends of chicken bones, a collection amounting in bulk to about that of a three ounce jar. These things had remained in this negro's intestine without any obstruction as in Dr. Gray's case. He had been repeatedly purged. He had an enormous ascites and I was especially interested in him from the standpoint of the ascites. We tapped him on numerous occasions and we didn't ever find these diverticula.

Dr. D'Aunoy held the autopsy and when the abdomen was opened at autopsy the gut was found very much thinned over the point of the retention and we could see the black masses of the retained particles in places through the intestinal wall. The point of interest is that apparently the intestine bore these insults and the foreign bodies remained and there it stayed. The pain was not much different from the pain of ordinary liver case, and indeed there was a very considerable amount of hemoptysis in that particular case.

I feel sure that if we had x-rayed this patient we would have found the shadows of the masses that would have put us on our guard. I think there was sufficient density in the masses to have cast a shadow. I don't believe, in the case of the foreign body Dr. Hirsch showed us today, that the radiograph would have shown this particular mass. The density is so slight that the shadow would probably not have been recorded on the plate.

The subject is an important one. In the absence of intestinal obstruction we are apt to overlook the retention of these masses as in this case I am speaking of. Although we were studying the case rather intensively, and it was one of a series of cases of ascites that we were studying from some other angle, we failed to recognize the foreign bodies until autopsy.

Dr. W. P. D. Tily (New Orleans): I once spent a nickel to buy a box of cracker-jack for a little fellow that had a fractured arm, and in that box we discovered a flat whistle. To my surprise, I was called a few days after to be told that he had swallowed this flat whistle which I suppose was slightly larger than a quarter. I was very much alarmed then, just as almost any of you would be. That was in the country and I was preparing to have the child sent immediately to the city for x-ray. To show how large a foreign body will pass through the small intestinal tract, this little fellow, the next morn-

ing, passed the whistle and I was extremely delighted.

I also have the history of a child, a first cousin of mine, who some years ago, during the early period of x-ray, was sent to Charity Hospital after he had swallowed a fifty cent piece. This boy was not operated on. X-rays were taken and the fifty cent piece was found to be so low toward the rectum, that if given time, it would come out without operation. The boy is now carrying his fifty cent piece on his watch chain.

When you already know that you have a foreign body to deal with and have already taken your x-ray, do you find it advisable to operate immediately? I think my former chief can tell you a little story of foreign bodies in the stomach. We know that we pass foreign bodies through the intestinal tract of all types but these were flat surfaces, the size of a half a dollar. So I think you must give them time and watch your case.

Another thing about persimmon seeds. I do not know why persimmon seeds will give you obstruction but I remember my father mentioned that to me; in the very early days he had an obstruction from persimmon seeds. Since that time, I have noticed many times little children eating persimmons very often had obstruction; you have to watch very carefully for persimmon seed obstruction. There must be a condition of tannate astringency that produces obstruction and holds these seeds together to form these obstructions.

Dr. Hirsch (in closing): We have never been able to find the diverticula in any of our cases. The contention I make is that as long as these things are still and don't move you don't have pain. The one that I showed you had a rough edge on it, a little piece like the keel of a boat, a sharp edge, and moving along that would catch in the gut and cause a pain. It was large enough to go through but when it would catch he would have the pain.

I don't believe we would operate on him if we had it to do over. I think it is a fiber that you see in the persimmon that makes those seeds catch together and make these big things. They will do it in the stomach as well as in the intestine.

Another thing that I forgot to mention and that is very important in diagnosis of obstruction, is that if you put your hand on the abdomen and hold it there for five or ten minutes, giving the patient an opportunity to have a peristaltic wave or two, you can follow it up and catch it where it stops. It is the same way with congenital stenosis, if you watch it closely.

The trouble is that we are in too big a hurry. We are not careful enough in the examination of these cases, and I believe if we understand the causes of these things and why such and such takes place and look for reasons, we can see. In this first case, the man had had this obstruction for two years because he hadn't eaten persimmons for two years and the one in his stomach was as big as a baseball and the other two in his abdomen certainly gave him trouble but after he had the first attack about a month before he went a long time and lived comfortably in the interval between the first and second attacks. So they can stay there without causing any trouble. But when they move they cause the same symptoms, abdominal colic just as you have in gall stones.

In conclusion, I will state that obstruction from foreign bodies is accompanied by the following signs and symptoms, a very much distressed and painful patient—pains intermittent and of short duration—seat of pain changing in location with or after each dose of morphine. Naturally these patients have the foreign bodies sometime before producing symptoms and flare after patient eats a hearty meal or performs unusual exertion. I would like to know why the mortality is so high, and why lung complications so often follow?

Could these bodies be forced through the ileocecal valve or any other construction in the bowel? And, if so, would it prevent the terminal lung changes?

THE MEANING OF BLOOD IN THE URINE.*

B. M. McKoin, M. D.,

Monroe, La.

Bloody urine often confronts both the internist and surgeon, as well as those specializing in urology. From a diagnostic point of view, until recently its cause has been rather obscure, if not entirely unexplained. Diagnostic science in diseases of the geneto-urinary tract has progressed and students have developed refined methods so that we can determine with a certain degree of accuracy the cause and source of blood in most cases.

*Read before the Louisiana State Medical Society, Monroe, April 15-17, 1926.

In searching the literature on the subject of hematuria, I find, that McKenzie reports 821 cases of hematuria, 344 of which originated from the kidney; 90 from the ureter; 174 from the bladder; 119 from the prostate and 60 from the urethra. Of this series 126 were due to tumor; 204 to stone and 88 to tuberculosis.

Kretchmer reports 238 cases, with conclusions that 50% were caused by tumor, with tuberculosis and stone in order of their frequency.

Davis reports 46 cases in which his findings corroborated with Kretchmer.

Chute reports 100 cases, 49% due to tumor, 5% to renal tuberculosis, 4% to stone, and the others due to inflammation along the urinary tract.

In my series of 102 cases, 48 were due to tumor, 18 to stone, 2 to tuberculosis, 10 to trauma, 13 to inflammation, 1 to diverticuli and 10 undiagnosed—(essential).

It is not my purpose to deal with the techniques which have been worked out in all cases, but, to bring you a simple message, a practical one, that will be of value as well as caution when called to see a hemorrhagic condition of the genito-urinary tract.

In any given case of bloody urine, the question to be answered, is whether there is actual hematuria, and if so, is it "essential" or the so called non-essential type. Having this before us, then from what point is the blood coming, and lastly, what are the pathological lesions causing it?

Where there is marked hematuria, the question of actual blood can be easily diagnosed, but, in those case where only a small amount exist, it becomes necessary for a careful microscopical examination, or some delicate chemical test to demonstrate the presence of blood. Any number of red blood cells in the urine is pathological and should be thoroughly investigated, and proper medical or surgical attention instituted, because delay may mean years of suffering, and a long-drawn-out result.

When we study the anatomy of the genito-urinary tract, and the wide field from which blood may escape, then we can understand what a difficult problem it is for the general practitioner and surgeon to solve. Often times a close clinical history, the associated findings in the urine, and a most careful physical examination, including blood analysis, will solve the problem. In cases where the findings are negative, then a careful routine urological examination, with the modern instruments can give great aid.

In the study of bloody urine, one must be systematic, and not leave a stone unturned. If we find that it is renal type, then we should know whether it comes from the parenchyma, as it occurs in nephritis, stone, tumor, tuberculosis, and inflammation; or, from the pelvis, as in stone, tumor, tuberculosis and trauma, or, pyo-nephritis; or some peculiar condition of the blood as seen in scurvy, jaundice, hemophilia, purpura; or, leukemia; or, some general intoxication, as in malaria and typhoid fever; or, smallpox infection or due to taking certain drugs, such as urotropin, cantharides, and turpentine; or, as Kelly mentions, tabes, multiple neuritis and hysteria.

The ureteral pathologies causing hematuria, are stone, tumor, stricture and trauma. The bladder conditions are tumor, stone, inflammation, syphilis, arteriosclerosis and certain parasitic disease.

In prostate pathology, 50% of the bleeding is said to be caused by cancer, then inflammation, hypertrophic condition, trauma and stone. The seminal vesicles are noted for possible cause, and must be eliminated. Urethral hemorrhage usually can be easily demonstrated.

The differentiation of the several locations usually can be done with the endoscope, cystoscope, ureteral catheterization,

pyelography, retography, and the functional test, all of which are today at the command of any physician in most small cities of the land.

Differential diagnosis of the lesion is the key note to success for any physician in the treatment of any condition. It is always easier to be wise after the event, and the urinary hemorrhage supplies us with many examples of this truth. Anyone who thinks out the pathology will in the end find the truth.

Men of extensive experience in the use of the modern methods of urinary diagnosis have found it necessary to make exploratory incisions for establishing a diagnosis, and such service should not be stamped incompetent, and certainly does not diminish the value of the usual method of urinary diagnosis.

Bleeding from stones may be considered almost typical when associated with renal colic. The pain is usually referred down the ureter to the genitalia, or down the thigh. The kidney is usually tender on palpation, X-ray may or may not show a shadow, depending upon the type of the stone.

In tuberculous hematuria there is always a history of frequency of urination, just as in tuberculosis in other points of the genito-urinary tract. The urinary examination may demonstrate a few pus cells microscopically, and an acid urine, but, no organisms. This picture should always be looked upon as suggestive of tuberculosis. There is an added infection later, but, not in the beginning of the disease. Many microscopical examinations are negative, but, a continuous study for acid fast bacilli will after a time be demonstrated. The urine should be centrifuged for a long period, decanting the supernatent urine from sediment and recentrifuging before giving a negative report. Bleeding in these cases are rather peculiar in that they begin early and may be profuse and gradually diminish. Cystoscopy may demonsrtate the characteristic lesion about the ureter of the affected side.

Hematuria from kidney tumor is not always easily diagnosed, 60% to 90% are of the hypernephroma type, occurring in the first year, and the fourth and fifth decade of life.

The hemorrhage is more rarely seen in children than adults. A patient may get along many years with a large tumor, unsuspected, because the hemorrhage does not occur until after metastasis or erosion of the blood vessels. There may be no history of symptoms until the bleeding is noted, and the same holds true in bladder tumors. Any sudden onset of profuse hematuria, without apparent cause through a prolonged course, which does not yield to ordinary treatment is suggestive. In cases where there is a history of pain, a loss of weight, enlargement, along with bloody urine, the diagnosis can readily be made. The functional test is of little value except in cases where the renal parenchyma has been destroyed, and then only the separate ureteral tests are of any value to demonstrate from which kidney, and the capacity of impairment to kindney function. X-ray is valuable where it shows a tumor shadow, or filling defect on pyelogram. I believe exploratory incision should be done on all suspected cases where the findings are not satisfactory, since it does the patient no harm and may save a life.

Hematuria following injuries is said to be easily diagnosed from a careful history of the blow, gun shot wounds or some crushing injuries. These cases require careful, painstaking study, and always a cystoscopic examination.

Recently two such cases came under my observation; one, with a history of a blow over the right kidney, and there was evidence on the skin surface of the injury, but, a cystoscopy proved a profuse hemor-

rhage from the left kidney, requiring a nephrectomy. Another was an auto accident, showing no lesions on either kidney, no tumor or pain referred to kidney, but, urine very bloody. The cystoscopic examination showed a continuous stream of blood escaping from the left ureter. Exploratory incision was done, and a badly lacerated kidney was found from which, when the capsule was opened a sudden gush of blood came, and the patient died on the table. The surgeon acting on the history and physical findings in the first case would probably have lost the patient because the sound kidney would have been explored and maybe removed.

Hematuria of acute nephritis is rather difficult to distinguish from the tumor in the beginning. However, after a lapse of time, the hemorrhage clears up, then we find albumin and casts in the nephritic hematuria. The onset usually is without pain, palpation and functional tests are practically valueless.

Hematuria from the ureter is usually caused by stone, tuberculosis or tumor. It usually begins with ureteral colic, severe pain along the course of the ureter, either from passing clots or stones. Usually the ureteral catheterization methods determine the source of the blood.

Hematuria from the bladder pathology can be easily diagnosed provided there is no obstruction to the passage of the cystoscope to the bladder. The causes here are chiefly tumor, stone, foreign bodies, cystitis, blows, injuries or over-distention.

Hemorrhage due to tumor is very similar to that of kidney, a sudden onset, long duration, large in amount, difficult to control, lasting sometimes for weeks.

Hematuria from stone is of short duration, small amount and usually follows violent exercise. A history of having to lay down to void is very suggestive.

Hematuria associated with cystitis has a definite history, frequency tenesmus, and urinary findings of pus and bacteria, as well as red blood cells. Syphilis should always be eliminated, as well as arteriosclerosis. Cystoscope again is a very valuable adjunct to differentiate the lesions causing the bloody urine.

Hematuria from the prostate is usually due to a large median lobe, which undergoes degeneration or carcinomatous condition, as Young mentions. Acute and chronic prostates, stones imbedded in the prostate substance are occasionally found to be the underlying factor in hematuria.

In hematuria occurring from the seminal vessels there is usually a history of premature and bloody ejaculation of the terminal type. On rectal examination, there are areas of tenderness, accompanied with nodes, general thickening of the vesical walls, or a swelling of the vesicle, and massage causes blood to flow through the urethra. In making the diagnosis it is rather difficult to distinguish this type of hematuria from that occurring from the posterior urethra in certain forms of vesicle cystitis, but usually with the cystourethroscope we can readily eliminate lesions along the posterior urethra, and vesical neck.

Hemorrhage occurring in the posterior urethra usually flows over the internal sphincter, into the bladder, while that occurring in the anterior urethra flows forward through the meatus. Terminal hematuria as occurring in these cases indicates without about two exceptions, that the pathology is anterior to the vesical neck. A small tone in the bladder impinging the vesical neck causing trauma to the mucosa at the end of the urination may cause a hemorrhage. The same condition may occur in cases of papillary tumors about the vesical neck eroding and causing terminal hemorrhage.

Prostatic calculi may intrude into the posterior urethra, giving a terminal hemorrhage. A hemorrhage from the anterior

urethra occurs in gonorrheal infection, using too strong solution, strictures, injuries, blows, instrumentation, intra-urethral chancroid and stone. There is rarely any diffculty in making a diagnosis where careful history is taken, microscopic examination of the urethral secretions, urethroscopic examination, and the use of a bougie aboule for stricture.

CONCLUSIONS.

(1) Hematuria is a symptom of pathology. Examination must be made while the urine is bloody.

(2) Subjective and objective symptoms should be thoroughly investigated.

(3) The pathology may be entirely obscure unless studied cystoscopically, endoscopically, microscopically and bacteriologically.

(4) Failure after full use of modern urological methods should be followed by exploratory incision if possible.

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THE RELATION OF THE GENERAL HOSPITAL TO TUBERCULOSIS.*

J. M. MOSELY, M. D.,

SHREVEPORT, LA.

The policy of the General Hospital has been one of exclusion to tuberculous patients, and when this general rule of exclusion is departed from the patients are surrounded by such an attitude of fear and oft-times neglect that they are soon made to know that they are unwelcome.

Exclusion of these patients from the General Hospital is hard to defend and, in the light of our present understanding of this disease, is unjustifiable. The action on the part of the hospital in excluding tuberculous patients is the result of a widespread campaign against tuberculosis. Its infectious nature was given to the public in a manner easily understood which rapidly developed an unjustifiably morbid dread of this disease extending to the medical and nursing profession as well.

Tuberculosis is not the only infectious disease offering a risk to persons. There are others, equally as, and more dangerous to the patient and those of the hospital staff who must come in close contact with the infections which are freely and willingly admitted to the General Hospital. Who of the hospital staff would not prefer to treat tuberculosis rather than a gonococcus infection of the eye, or cerebrospinal menigitis.

Recent experimentations have proven that the virulent organisms are found only in the sputum, and we now know that the tubercle bacillus is a non-motile organism and has no intermediate host. If the proper precautions of covering the mouth, when coughing or sneezing, with a burnable material are followed, droplet infection is absolutely prevented. When the sputum is properly disposed of, by having the patient spit directly into a paper cup, which is burned, there is no danger of infection for the adult.

It is a known fact that the percentage of nurses and staff contracting tuberculosis in tuberculosis sanitoriums is far less than in the General Hospital.

In the light of present teaching we must confess that enthusiasm and energy more than skill were used to impress upon the public the infectious nature of this disease

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and a belief has been left that the tubercle bacilli existed everywhere. This led to an exaggerated idea of the infectious nature of the disease. While there is a tendency on the part of the public to depart from this irrational view, it will be a long time before it is willing to accept the present day belief and observation that tuberculosis attacking the young adult life is usually due to an infection in early childhood, seldom being conveyed from adult to adult, through contact or association.

The hospital of yesterday is not the hospital of today, nor will the hospital of today be the hospital of tomorrow, for these institutions are fast recognizing and assuming their responsibility to society. Examples of this are seen in the building of better hospitals, adding needed and more modern equipment; cheerfulness and sanitation is being enforced as never before, and ideas of the prevention of disease are being given to the patients.

The General Hospital occupies a position midway between the medical profession and society, and is no longer a crudely constructed repair shop for the mending of human beings—satisfied with primitive ideas and methods—but is fast moving to a strategic point, where, with their consent this disease, which has hardly been checked, can be met in the wards at the bedside of the patients by the combined efforts of the medical profession and society, for a final eradication of the disease.

The result of the hospital closing its doors to tuberculous patients has had and is having far-reaching effect. If the tuberculous patient is to be given the best chance for recovery, this common disease must be detected in its incipiency. This oftentimes taxes the skill of the most expert clinician, yet these patients are excluded from the General Hospital, thus, unfortunately, allowing the doctors receiving their training in the General Hospital, as a rule, to go to the public probably less prepared intelligently to advise and treat tuberculosis, than any other disease, with which they will have to deal. Training offered by the hospital to the nursing profession for the proper care of these patients amounts to practically nothing; they, too, like the medical students, leave the hospital with slight knowledge of one of the most common of all diseases.

For the General Hospital to do its share to those suffering from this disease it is not necessary that they openly advertise to the public that they are prepared to care for those suffering from tuberculosis. It seems, that, without attracting undue public attention, they could provide suitable wards where these patients can be kept, with little danger of infection to others. This would give opportunity for working up the border line cases, allowing the proper final segregation of these patients and provide comfort for those who have but a short while to live. Thus, providing for these patients, the public would know, that in their midst, is a place to which they can turn as a port of safety.

This phthisophobia affecting the general public would, to a great extent, be allayed, if patients could know that they would no longer, when diagnosed as tuberculous patients, be rushed away, in many instances with limited funds, to watch, as it were, this race between time and the infection, being satisfied to accept a verdict of either cured, arrested or unimproved.

An economic phase of admitting tuberculous patients to the General Hospital is to be considered. Instead of the separate tuberculosis sanitorium in a community, with its independent maintenance, building, and administrative expense, wards can be added to the General Hospital and the same results obtained, as in a separate institution.

To sum up, it is evident that there is need of accommodations for treatment of tuberculosis in General Hospitals. First, for the good of the patient; second, giving

opportunity to the physicians and nurses to learn tuberculosis, in the end must benefit humanity.

DISCUSSION.

Dr. Henry Boswell (Sanatorium, Miss.): It is worth my trip over here, to say nothing of the pleasure I have had in my associations for the past two days, to hear a paper read in the South advocating the use of general hospitals for the care of tuberculous individuals.

For a number of years, as a member of the National Board of Control of Tuberculosis, we have advocated that some beds be set aside in the various community general hospitals for the care and treatment of this particular disease, but owing to the fact that our people, as the doctor has so well said, are afraid that if they open their mouths within three hundred miles of a tuberculous individual they will become infected at once, we have been unable to put it over.

We know that today, as the doctor said, a case of tuberculosis can be handled safely in any institution provided the head of the institution or the ones in charge of the institution are able to give the correct information to the patient, guarding against the danger of the sputum and teaching the patient the prevention of the spread of this infection and guarding particularly against the excreta. We fellows who are dealing with tuberculosis from day to day know that in almost every stool of the average patient tubercle bacilli can be demonstrated if carefully handled because of the fact that however careful they seem to be people swallow some of the sputum containing the bacilli and they are passed through.

Whether a general hospital can be handled in such a way as to take the place of a sanatorium is a very doubtful question and in all probability it would be necessary in the average community of any size to have a separate institution. It might be under the management of the same board of directors, the same business manager, etc., so as to save the overhead operating expenses, but it would be necessary, perhaps, on account of crowded conditions to get away.

We have recently developed an innovation (some of the men have been working on it for the past two or three years), bringing in one type of tuberculosis to the general hospital, and that is the inflation of the peritoneal cavity with oxygen to handle tuberculous peritonitis. In my opinion within a few years if the future results continue as promising as the experiments all tuberculous peritonitis will be handled in institutions such as general hospitals.

The question of bringing to the people's minds the educational value in the general hospital is one that is of extreme importance to every man who is fighting with the idea of some day controlling this particular disease. The education of the nurses at the present time is inadequate, with all due respect to all of the general hospitals. I hire and use only trained nurses or supposedly trained nurses in all my work. They have to be retrained in the handling of tuberculous individuals. If the general hospitals assigned a certain number of beds to this condition, we certainly could have turned over to us competent trained nurses, or get a co-operative working organization between the general hospital and existing sanatoriums whereby our nurses might be trained in the handling of this disease.

Then, too, the training of internes. It is a regrettable fact that the schools of this country are not teaching properly the examination of the chest. Many of them are not. Some of them are, perhaps, but so far as diagnosing early tuberculosis, the average interne who comes to my service is just as I was when I came out of school, knows just about as much about examining a chest for early tuberculosis as I would know about examining some man for a disease I had never seen.

To quote further from the doctor's paper, he refers to nurses or the medical staff breaking down in institutions for the treatment of tuberculosis, etc. After many, many years of service I have never seen an individual break down as a result of contact in an existing, well-organized sanatorium, but every day or every week I have heard of nurses from general hospitals who have broken down with the strain of doing the first two or three months of their work of scrubbing floors and worrying about whether they are going to be admitted or not. I have never yet come to feel that scrubbing floors is a part of the training of a nurse and why they are required to be servants for three months before they take training, I can't see. I think it would be just as reasonable for a student of medicine to have to serve as janitor of his college for three months before he was admitted. Day after day they are sending us the victims down our way. I want to say again that I am delighted to hear my first paper in the South on this particular subject.

Dr. Wallace J. Durel (New Orleans): I am glad to state that Louisiana was the third state in the Union that established a tuberculosis department in a general hosiptal. In 1912, some time before Johns Hopkins or Harvard or any other general hospital, New Orleans had its private wards, now it has the whole building and soon will

have the wonderful gift of Mrs. Dibert, a first-class tuberculosis hospital. Louisiana is not behind. Louisiana hasn't read papers on the subject. It has gone forward and organized its own tuberculosis department to give the example. But, gentlemen, the example has not been followed by other institutions and I hope that the words of Dr. Boswell will be impressive to you and make you think of the matter.

Just think of the number of tuberculous patients in general hospitals that have come there for operative work, and as I said in an address given to the teachers' association, your nurses have sometimes gone into the Charity Hospital where nothing is known as far as the nurses is concerned of the patient's condition, whether he is tuberculous or not. The nurse, unknowingly, comes in close contact, takes no precaution whatever, and when this nurse develops tuberculous lesions, who is to blame? You gentlemen who are at the head of general hospitals are to blame for the deaths of these girls. The superintendent of nurses ought to be blamed for allowing them to approach the beds of these general hospitals where there are tuberculous patients.

It is a serious responsibility. The chief thing that has prevented these conditions from being modified is the great belief that tuberculosis cannot be treated anywhere but in high climatic regions. Fourteen years ago when I came before the hospital board they thought me an insane man and now I am glad to see that with all my insanity on that subject things are being placed on a good footing.

If the town has no institution large enough, it can have an annex for tuberculosis patients; if it has, however, a tuberculous institution in its midst, no doubt the nurses and our students can be trained in those institutions and made to believe and know that there is no more danger as far as approaching the bedside of a tuberculous patient is concerned. No more should the nurse avoid such cases.

It is very amusing in the Charity Hospital. My internes will not come near a tuberculous patient unless they are compelled to do so. We do not have student nurses of the graduating class because the student nurses in the training school have been taught to stay away from such places. Well, then, why become a nurse? Is she going to slink from the bedside because there is danger?

It was very amusing the first time I went into the Charity Hospital in 1912, the nurse came in with a handkerchief over her mouth. She didn't want to breath in that ward. If she had been properly educated, she would have known that with proper precaution there was no danger.

The hospitals that are thinking of having an annex for tuberculous patients should cater to far-advanced cases or bedridden cases, hospital cases. Oh, no doubt it will not suit some of us physicians because, gentlemen, it takes courage to treat nothing but advanced cases. No doubt, there is much more advantage to the physician in charge in treating incipient cases and putting out a wonderful list of recovered patients, but it is as great a reward when you have faced death every day, day in and day out, to see as we have in Charity Hospital about forty per cent of the far-advanced patients brought in there and leave at least in a condition able to walk out of the hospital, many of them to be self-sustaining. And as to the ones who die in the hospital, think of the number of patients that would have died as paupers in the streets, in the gutters, if it were not for a proper building in the Charity Hospital.

Let us not wait any longer. Let us see that all hospitals have some precautionary method. At least let us protect our nurses from infection. Let us protect our doctors from infection from patients that are in general hospitals. There is more infection being carried about in the wards, surgical and medical, of general hospitals than there is in any tuberculosis hospital.

Dr. H. C. Mosely (Monroe): I was particularly anxious to discuss this paper in that it was my brother that read it. Brothers have been interested in what other brothers have been doing for a long time; for instance, Cain and Abel and Jacob and Esau.

I had the privilege and pleasure of serving on a tuberculosis commission in El Paso, Texas, in 1919, just after the World War, trying to rehabilitate some soldiers. The reading of this paper is timely in Monroe. The hysteria that surrounds a patient when you tell him that he has tuberculosis is almost like the ravings of a Lady Macbeth. If it is not the patient, it is their people who stand away off. They follow that patient possibly like Peter followed Christ, at a distance. They have unwarranted fear of that condition.

In our postmortems that we held during the war, we found robust, sturdy men that had been rehabilitated without their knowledge before they came into the service. We held a postmortem on one boy who died of the flu. He took the flu one day, had the streptococcus hemolyticus infection, the acute kind, and died. The postmortem showed a tuberculous cavity that you could put your fist in. That boy played center

on the team sent out by the Army and Navy General Hospital at Hot Springs, Arkansas, where I had the pleasure of being the chief of the surgical service.

In regard to the other things they tell of George Washington, and these stories circulated about him just lately, one I think is that he had tuberculosis. It is generally conceded that Andrew Jackson, Old Hickory, had tuberculosis.

Nevertheless, people feel that when you tell them they have tuberculosis they are doomed, the curtain is run down on their activities. There are a lot of things that make a person more dangerous to a community and I have often wondered why they take an old Negro with syphilis and keep him there at the expense of the State and yet deny some promising young man the privilege of getting well in his community among his friends, where he is accessible to his friends.

Statistics will not bear out that more people get well in El Paso than they do in Pittsburg. The point that I want to make to the people of Monroe, because I know there is an hysteria here and I feel it, about sending people to El Paso, El Paso is a mecca. It is a place where they go to worship at the shrine of health. And I want to say this, that the statistics do not bear out that more people get well in El Paso than do in Pittsburg with the proper surroundings. The treatment of tuberculosis is rest, it doesn't make any difference where it is, in a joint or in a lung. The treatment is rest and sunshine and contentment.

Milton said a long time ago that the mind is its own palace and of itself makes a heaven or hell. The same thing applies to a disease, if you take that person away from his surroundings and out of reach of his home. A man with a family when sent out there is restless and can't sleep. God Almighty showed to the world and to people that the best way to conserve energy and to conserve power is to put an animal to sleep. When He got ready to conserve a bear through the rigors of a winter, He put him to sleep. If you want that bear to die, keep him awake.

Dr. J. A. Danna (New Orleans): If the previous speaker hadn't mentioned George Washington and these other great celebrities as cured tuberculosis cases, I would probably have kept still, but I happen to be a cured tuberculosis case myself and that is the reason for my interest in this work.

I have been preaching in New Orleans for some time collaboration of the various forces that are fighting tuberculosis, and of all the forces that are fighting tuberculosis there is not one force which is greater, which is more potent for good, than a tuberculosis department in a general hospital.

General hospitals are usually situated in large populous centers and if you don't make the place where tuberculosis patients are going for medical attention handy and easy to get to, many patients are going to neglect getting attention until they are so sick that somebody carries them wherever they have to go. Therefore, I say that you should have a first-class department of tuberculosis in every general hospital.

I am very glad to corroborate what Dr. Durel says about the new department of tuberculosis in the Charity Hospital. It is going to be in a building built especially for the purpose and I think will be at least the equal of any such building in the United States.

Once more let me stress the fact that all the forces working to fight tuberculosis, instead of overlapping each other, should try to work together to accomplish a common good.

Dr. C. P. Gray (Monroe): Just two things prompt me to say a word under this heading. The first is that in my opinion all general hospitals should have some provision made for the care, either temporary or permanent (that is a detail to be worked out by the state in my opinion), of tuberculosis patients.

For instance, here in Ouachita Parish we are at liberty to send an operative case or a medical case to Charity Hospital in New Orleans or Charity Hospital in Shreveport and we know that patients will be cared for to the very best of the ability of superintendents of those hospitals. Now then, we have a patient with tuberculosis. Neither hospital accepts those patients. I can cite you today three cases west of the Ouachita River that are in dire circumstances and are not able to buy medicine or food, dying of tuberculosis.

The state should make some provision for this class of patients. I agree with Dr. Mosely thoroughly that when they take care of a case of syphilis or syphilitic aortitis, tuberculosis being just as prevalent as syphilis, that some arrangements should be made for the care of tuberculosis.

The next point is, climatic conditions. A person in Ouachita Parish develops tuberculosis. He wants to go west. Why? In my opinion it is all wrong. I believe I am correct when I say that according to government report, Dr. Durel can bear me out on this, Louisiana around Cov-

ington and the southern part of the state has climatic conditions second best in the United States. If my memory serves me correctly, that is something similar to the government report. So then, why should a person leave here and go west unless he has an unlimited amount of funds. As Dr. Mosely so well brought out, what you need for tuberculosis is rest and food.

Dr. Danna: May I clarify a statement? Did you say that the Charity Hospital in New Orleans will not take tuberculosis cases?

Dr. Gray: That is my impression.

Dr. Danna: I think you are wrong and I will be glad to see that they get in there if you send them to me.

Chairman Seemann: The facilities are such that it is sometimes impossible to take them, just like appendicitis cases or any other condition, but I believe they accept them as long as there is room.

Dr. Thos. E. Wright (Monroe): In the care of tubercular patients, our treatment which includes general care may come under two headings. One is the home treatment when for some reason or other they must stay at home and have to be treated there, and the other one is hospitalization.

Now unless it is imperative that they do stay at home, I can't help being in favor of all tubercular patients, where there is any opportunity of doing them any good, being hospitalized. If they are hospitalized, it must be either in a pay hospital, like a private sanatorium, or must be in a general hospital—I mean in a pay hospital or a charity hospital. In other words, under the head of general hospitals comes your private sanatoriums, your general hospitals where patients pay and your general hospitals where treatment is free.

In Louisiana undoubtedly many more people who have tuberculosis would go into hospitals if they felt that hospitals offered to them the work of specialists as we have in this particular department of the Charity Hospital in New Orleans and some others I could mention. If the work that is being done in the New Orleans Charity Hospital could be part pay and part charity or all charity in selected cases, they would have many more applicants even than they have today.

This line of thought leads us up to a general state plan or state program. There are many hundreds of people in Louisiana today with tuberculosis who would go into a sanatorium owned and controlled and operated by the state, either part pay or all free, as they have in Mississippi and Georgia, and as the work is being done so successfully there.

It is remarkable how people resent the fact that they have to go to a charity hospital for tuberculosis. I am not disagreeing with the author of the paper when he advocates that they go to a general hospital, but I do say this, that the average general hospital offers very little to your case of tuberculosis because of the lack of skill on the part of the teaching force, of the nurses and the doctors who attend them there. You have only the skill of your attending physician plus the average skill of your average nurse.

In other words, if you had tuberculosis where would you want to go? I would want to go to a place where at least it was part pay, not charity. I would want to go to a place where every person connected with that institution had a keen insight into the care and treatment of tuberculosis patients and where people wouldn't be afraid of it, where all the hysteria, as Dr. Mosely mentioned, had been eliminated, where people wouldn't mind talking to you even though you had it because they either had recovered from it or had it at the present time.

I am thinking of it from a state-wide viewpoint. In view of the fact that the inability of Louisiana hospitals to handle the vast number of people who should be hospitalized in Louisiana is so evident, it becomes a state problem and the state must be responsible for them to that extent which the state will assume. Sooner or later the Legislature will make provision for it, and it is not a pipe dream when I say we may have district tubercular sanatoria in Louisiana. We have eight congressional districts and a district sanatorium, owned and operated by the state or partly owned by the parishes which make up the district, would take care of it.

For example, in the Province of Saskatchewan all of the hospitals in this province under the Canadian law must set aside five per cent of their beds to be used exclusively for tuberculosis patients. One dollar per day is paid by the government to these hospitals for each tuberculosis patient confined therein, provided the patient is unable to pay for it. By this general hospitalization plan in every hospital in the Province, they have reduced, according to the statistics they give us, their mortality percentage of tuberculosis patients admitted to less than nine per cent.

Sooner or later we are coming to it and the state must accept this responsibility. When it does we will fall in line and be put on a basis

similar to Mississippi, similar to Georgia and similar to the Province of Saskatchewan.

Dr. Mosely (in closing): I wish to thank the doctors for the liberal discussion of this paper and to say that we all know we have this condition but we haven't provided a remedy. At Charity Hospital of Shreveport, we lost one unit of the Hospital, three wards, by fire, and in rebuilding this unit we have asked the architect to draw plans whereby we will be able to use the roof of this wing of the Hospital to care for some of the unfortunate patients that are brought to us almost dead giving them some degree of comfort until they die.

I think that if the profession of this state and the citizenship at large could be superintendents of a charity hospital for awhile and see the unfortunate people that come there and that are turned away without hope, when the Legislature meets they would be down there and demand that a fund be given to start the work to provide a place where these patients can go for care and treatment.

THE ACTIVITIES OF THE U. S. PUBLIC HEALTH SERVICE IN THE SOUTH.*

JOHN McMULLEN, M. D.,
Surgeon, U. S. Public Health Service,
Medical Director Fourth District.

The average span of human life in this country is now about 56 years. When this is considered in relation to the span of life of comparatively a few years ago, it is astonishing to note what great progress has been made in the conservation of human life.

In past ages it was exceptional for an individual to live to what is now the expectancy. There was a total absence of knowledge as to the proper care of the body and absolute ignorance of hygiene and sanitation. War and disease, therefore, claimed their victims in millions annually and the wonder is that any survived.

This remarkable increase in longevity has not been wrought by miracle, nor has it been accidental. Naturally, therefore, we inquire as to the reason. The answer is scientific knowledge of the cause of disease and modern laws and regulations made as a result. Improved sanitation has been a very important factor in increasing longevity.

Disease is largely due to the ignorance of man and there is still much superstition concerning its cause. Communicable diseases are still unduly prevalent and the continued presence of smallpox, typhoid fever, etc., leaves much yet to be done.

Future historians will probably say that we of today were sadly lacking in knowledge of disease and preventive medicine. We know positively how smallpox can be prevented and have robbed this disease of its former terrors. The material fall of the death rate during the past one hundred years has been greatly influenced by vaccination for smallpox. Despite this fact, the smallpox case-rate in this country is now apparently the highest of any civilized country in the world. In the calendar year 1924, reports from 35 states showed an increase of 75% in the number of cases and a large increase in the death rate.

It is indeed strange and certainly unfortunate that people continue to resist vaccination. Smallpox has been unduly prevalent in many states during the past winter and it has been difficult, by reason of prejudice, ignorance and indifference, to get the people to accept vaccination.

In some of our larger cities during the past year there has been a substantial and widespread increase in typhoid fever. Some speculation has been indulged in as to why 1925 should have been a "typhoid year." We are very well informed as to the manner and conditions under which this disease is spread, as well as its prevention, and it should be acknowledged that this increase has been due to the fact that we failed to put this knowledge into practice. The combined effort, therefore,

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of an intensive campaign to utilize our knowledge and educate the public to accept it would bring far better and more practical results.

In the promotion of public health and the practice of preventive medicine, it is co-operation between State, local and Federal health authorities that accomplishes the most good to the most people. It is only with this co-operative partnership that we can hope to overcome prejudice, educate the public and finally practice that which we know by scientific investigation to be the proper procedure.

With this same idea of co-operation and to bring about closer co-ordination in Service work and to promote efficiency, the Continental United States has been divided into six Public Health Districts. An experienced commissioned officer of the Public Health Service has been assigned to each of these as Director of the District.

The District of the Gulf, or District No. 4, comprises most of the Southern States, and is sometimes referred to as the Southern Area. This district is comprised of Florida, Georgia, Alabama, Mississippi, Louisiana, Texas, Oklahoma and Arkansas. The writer is assigned as the Director of this Southern Area with headquarters in the Custom House, New Orleans, La.

Although this decentralization is recent, it has proven very satisfactory, serving as it does to promote cordial relations and better understanding with State and local health officers. Such relations and understandings tend to obviate unnecessary delays in emergencies when co-operation is indicated and immediate action essential. The several states function in the State under their own health laws, while the Federal Government, in public health matters extends over foreign intercourse, interstate intercourse and Federal Territory. The U. S. Public Health Service deals with all matters of health relating to international and interstate intercourse.

It is, of course, most desirable that the States care for the intrastate problem but the Service is always desirous of complying with requests from the State Health Officers and to render such advice and assistance as possible. Indeed, there seems to be an increasing recognition in Washington of the rights of States to take care of their own internal affairs and criticism of the fifty-fifty plan is more and more pronounced.

It is believed that the Public Health Service can be of greatest aid to the States through research. Research work is a fundamental function of the Federal Government and broad authority has been established for the conduct of investigations in the interest of public health. The extent to which research may be conducted is limited only by the facilities provided. In the interest of the States, their facilities should be utilized, when practicable, in this connection.

From the viewpoint of the national quarantine, the District of the Gulf or Southern Area is the most important of all sections of our country. Although scientific knowledge and the progress of modern medicine has minimized the importance of quarantine, it is still necessary to guard against the introduction of those diseases designated in the Federal Quarantine Regulations.

In the light of our present knowledge radical changes are warranted in our Federal Quarantine Regulations and there is no doubt but that they will have to be re-written in the near future.

Of all the major quarantinable diseases, yellow fever has always been the one most feared and dreaded in our Southern States. Before we learned of the aedes aegypti in connection with the spread of yellow fever, the strictest quarantine was enforced and, since we were dealing with an unknown enemy, was entirely justified as the best known method of protection. Quarantine

stations were established in the most isolated places and the farther away from civilization the better, was the idea of the best minds of the time. The quarantine station for New Orleans was placed ninety miles down the river from the city; Tampa Bay, Florida, Quarantine Station was established at the mouth of the bay and 35 miles from Tampa; Key West, Florida, was guarded by the station on Dry Tortugas, 65 lonely miles distant; Savannah, Georgia, at the mouth of the river in a vast marsh. About the only solid ground at this station is rock ballast removed from vessels. This rock was taken from vessels and each piece carefully dipped in bichloride solution to prevent its spreading yellow fever. To add to the gloom and loneliness of these isolated spots, the festive mosquito was present in multitudes. Tortugas station was abandoned some years ago but the others are still at the same location. It is hoped, however, that all quarantine activities will soon be performed in the ports and the isolated stations be retained only as auxiliaries in the event it should ever become necessary to care for an infected vessel there.

The constantly increasing congestion of our country and improved facilities for rapid transportation render it more than ever necessary that the Federal Government have full charge of maritime and border quarantine stations and these are now under the Federal control and operated by the U. S. Public Health Service. It is indeed fortunate that our modern knowledge of preventive medicine preceded the present age of rapid transportation facilities.

While the quarantinable diseases are cholera, yellow fever, smallpox, typhus fever, leprosy, plague and anthrax, yellow fever and plague give us the most concern at the maritime stations. Although we are in constant communication with ports infected with plague and yellow fever, there was no importation of these nor other major quarantinable diseases during the past year. The incidence of yellow fever throughout the world, during the past year, was the lowest ever recorded. It was also the first year practically in the history of the United States quarantine that there was no detention of ship's passengers or crew on account of yellow fever.

With our present knowledge we are justified in removing a case of yellow fever from a vessel and placing it in a modern city hospital, provided, of course, it is done with the patient constantly protected from the bite of the aedes aegypti by mosquito netting. In fact, any disease can now be so removed under the proper precautions.

The quarantine station is the first line of defense but the Marine Hospitals of the Service are the second line of defense. The quarantine stations should therefore be brought into close proximity to the Marine Hospitals in order to co-ordinate more advantageusly these two arms of the Service, and this idea is concurred in by the local health authorities.

Bubonic plague is still prevalent in many parts of the world as an ever present menace. In December, 1924, rodent plague re-appeared in New Orleans for a short time. Upon request, the Public Health Service assumed direction of measures for its suppression. A determined campaign was promptly inaugurated with the result that within six months after the last plague rat was found and less than eight months after the reappearance of rodent plague, New Orleans was declared to be free of this disease. As a measure of extra precaution, trapping, etc., was continued for about three months longer. This very effective campaign was made possible by the prompt, thorough and substantial co-operation of the State and City health officers and bacteriologist. All laboratory work in connection with this campaign was done under the able direction of the State

and City bacteriologist, whose services were most valuable.

The maritime quarantine is conducted in accordance with the Rules and Regulations prescribed by the Treasury Department, with the idea of the least interference with shipping compatible with safety to the public health.

The border quarantine is very important and is concerned with smallpox and typhus fever in addition to yellow fever and plague. One-half of the United States-Mexico Border is in this Southern Area, and these diseases, potential dangers at all times, permit of no relaxation in public health work. When it is considered that this Texas border is about 1000 miles in length, it is rather surprising that more quarantinable diseases have not been brought over. Some years ago the border was visited by a mild typhus in the form of Brill's Disease. The Public Health Service has now established inspection and quarantine stations along this border at strategic points. All unprotected persons are vaccinated against smallpox before they are permitted to come into this country. Vaccination has now become such a routine practice that practically all persons on the border are protected from smallpox. All passengers, regardless of class or mode of travel are required to pass inspection.

These stations are equipped with shower baths and steam or hot air sterilizers. All persons with lice are detained, bathed and their clothing thoroughly treated in the sterilizers for the destruction of lice, before being allowed to come into the United States. Head lice are destroyed with local applications. Large numbers annually, of persons (mostly Mexicans), are bathed and their clothing disinfected at these stations.

For some years an intensive campaign against the aedes aegypti has been conducted along the Texas border from Brownsville to El Paso and extending as far east as San Antonio. The purpose of this campaign was to obtain a low aedes index (under 5%) to guard against the invasion of yellow fever. This work has been done with the co-operation of the State and local authorities of Texas. In view of the continued absence of yellow fever in Mexico, this mosquito work will be discontinued at the expiration of the current fiscal year.

The Service has for some years conducted a malarial campaign in co-operation with a number of States. While some sections are relatively free from this disease, there are others where it is still a serious health problem.

Attention is invited to the efficiency of the Service hospitals in this District. These have been very greatly improved and are now modern hospitals where the patients receive the best scientific care and treatment. The result is an increased number of patients.

The Marine Hospital in New Orleans is sadly in need of a new building. Despite this handicap, however, this hospital has a daily average of about 375 patients—a very material increase over a few years ago. It is hoped that a new building will soon be erected.

The leprasorium, at Carville, La., now has about 260 patients and the number is constantly increasing. This is now a modern institution where leper patients receive the most approved care and treatment. Patients are being admitted practically daily from the various sections of the country, thus relieving the States of the burden of caring for them.

Marine Hospital No. 9 at Fort Stanton, New Mexico, has 233 tuberculous patients under treatment.

The last immigration law, materially restricting immigration, was most laudable legislation. It is unfortunate, however,

that it was not enacted many years ago. The mental and physical examination of all incoming aliens is done by the Medical Officers of the U. S. Public Health Service, whose duty it is to detect and certify to the immigration officials the mental and physical defects contemplated under the immigration laws. Under former laws, one million aliens landed in this country within a twelve months. It is therefore no wonder that the mentally defective and insane were landed and it is this class which is the most important to exclude. Indeed the exclusion of these mental disorders is of even greater concern to this country than is the quarantining of cholera, smallpox, etc. The law provides for deportation of the various mental disorders. This portion of the law, however, was not intended solely to prohibit this class of people from merely becoming public charges. It was for a more far-reaching effect and was in order to exclude those aliens who are physically, mentally and morally undesirable for parenthood—those who will produce an inferior race—the standpoint of national eugenics. This country was founded and developed by picked men and women and it is our duty to select the best specimens for the parents of future citizens. The mental defective begets his kind in ever increasing numbers. We are living in a progressive age. Those clergymen and others who have declared themselves in favor of marriage only between those mentally and physically fit should be considered as pioneers in the great field of eugenics.

The time would not permit, nor is it intended to attempt to describe in detail the many problems in which the Southern States and the Public Health Service are co-operating such a pellagra, rural sanitation, trachoma, sanitation of milk, shellfish sanitation, morbidity reports, stream pollution, child hygiene, Brill's Disease, venereal disease, sanitary engineering, control of biologic products, etc.

It is very gratifying to note the cordial goodwill and co-operation of the State and City health officials with the Service. Such a partnership and co-operation will hasten the day when preventive medicine will overcome disease as the result of combined efforts and tremendously increase the span of life.

The writer feels that, as Medical Director of this Southern Area, should he not acknowledge the material assistance, hearty co-operation and loyal support of the health officials, he would be negligent in his duty. Situated in Louisiana as is the headquarters of this District, these acknowledgments are particularly applicable to the health officials of this State.

DISCUSSION.

Dr. N. F. Thiberge (New Orleans): Dr. William Mayo in his brilliant talk the other night stressed the necessity of the doctors taking recreation, and I think that it would be well for us to request the Government to help in a movement to establish tourists parks all along the highways to increase the facilities for recreation and sports. I think there is no better way of increasing the span of life and its enjoyment. Therefore, I should think that the Government would seriously think of fostering and helping a movement of that sort which has already been started in this State.

Dr. Charles R. Gowan (Shreveport): I presumed that this paper was not to be discussed because the essayist is the supreme authority as far as we are concerned. We can express our appreciation for his presence here and the splendid co-operation he has given us in the attempt to protect the health commissions. It is fortifying to have him here and I want to embrace this opportunity of telling all those present, if any of you have an epidemic in your communities, there is not a better expert on this trouble than Dr. McMullen. He has demonstrated that in other places as well as in his splendid work in controlling communicable diseases not only in the United States but throughout the world.

Surgeon McMullen: I have nothing further to say, Mr. Chairman, except in answer to the doctor's remark. We had a meeting last fall which was designated as a "Mosquito conference." Most of you were present. At that time it was determined that one of the first things that we want to take

up is the elimination of the mosquito, one of the troublesome things. At that time it was determined by that conference that a survey should be made to determine what the real problem was. Estimated expenses were to be about $50,000. A committe was formed to work out plans and obtain the amount of money and start the survey. Just what has been the result I am not informed but it is hoped that it is going forward and that we will arrive at some very definite conclusion.

PROBLEMS IN SURGICAL DIAGNOSIS AND TREATMENT.*

ISIDORE COHN, M. D.,

Associate Senior Surgeon, Touro Infirmary; Professor of Clinical Surgery, Tulane University,

NEW ORLEANS.

Co-operation leads to greater success in surgery as in every other field of human activity. If there is a surgeon who has never felt the need of co-operation with his colleagues or one who has not been forced to co-ordinate facts from the literature my remarks would have no appeal for him. The great number of medical meetings testify to the doctor's unsatisfied desire for more information. Emphasis is being constantly placed on the necessity for more accurate diagnosis before instituting treatment. Dr. John Gibbon in his presidential address before the American Surgical Association, 1926, said: "The advancement of the art of surgery will come not with the invasion of new anatomic fields nor with the further perfection of technic, but will come with increased knowledge of the cause and prevention of disease, with the improvement in diagnostic methods, with the exercise of better surgical judgment and with a broader knowledge of general medicine."

Your desire for the discussion of some of the laboratory aids in diagnosis and treatment was expressed in your invitation to Dr. Elizabeth Bass, for whom I am substituting. I therefore felt that I could do no better than to attempt to discuss briefly some of the more important diagnostic measures which are not used as often as they should be; briefly to discuss the question of surgical judgment and the need of a broader general knowledge of medicine.

The first of the physiological laboratory methods which needs a broader and more general use is blood chemistry. Knowledge of the value to be attributed to the estimation of the carbon dioxide combining power of the blood; chloride contents; blood sugar and nitrogen contents is absolutely indispensible to the scientific practice of surgery.

It is hardly conceivable that anyone doubts the value of blood sugar determinations. By careful observations and the judicial use of insulin, surgery in the presence of diabetes, has become almost as safe as surgery on non-diabetic patients. It is within the memory of most of you when a case of diabetic gangrene like the following would have been considered almost hopeless, at least there would have been a very grave prognosis. With the co-operation of the laboratory and the skilled internist, operation produces no untoward effect immediately, and the patient makes an uneventful recovery.

ILLUSTRATIVE CASE.

Mr. W. C.—8863: 9-2-25, age 64. Referred by Dr. I. I. Lemann for operation. Patient has been treated in the diabetic clinic for more than a year, receiving as much as 36 units of insulin daily. During July, 1925, an ulcer which he had on his foot was almost healed, only a small area of redness remained. During the past two months pain in the foot had become so severe that he returned for consultation on December 3, 1925.

Our findings were: Large excavated ulcerated area on dorsum of the foot, corresponding to the level of the 3rd and 4th metatarsals. This area is irregular in contour with punched out edges. The entire surface is covered by a thick foul smelling dry scab. On the outer side of the dorsum of the foot, beginning about the web between the great toe and the first toe and extending backward to external malleolus, the skin is glossy and there is a reddish violet hue. The fourth toe has a distinct violet color. The plantar surface

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*Read before the Seventh District Medical Society, Lake Charles, September 23, 1926.

of the foot has a similar appearance to that described for dorsum of foot. The skin is cold. Pressure produces pallor with a slowly returning reddening tint. There is a loss of sensation of pain in the fourth toe. Hyperesthesia in other toes. Dorsalis pedis pulse not palpable. Posterior tibial pulse not palpable. Recommendations: Immediate amputation just below knee. Gangrene-diabetes-arterio sclerosis."

X-rays showed marked arterio sclerosis of the anterior and posterior tibial and dorsalis pedis.

Operation December 4, 1925. Amputation about four inches below the knee. (Circular amputation.) The only interesting phase of the operation was the fact that the vessels were all noted to be thicked walled, and there were calcareous deposits in them. The lumen of the vessels at the level of the amputation were patent, and the vessels bled freely when allowed.

After ligating all of the vessels, the stump of the tibia was bevelled, muscles whipped over, the skin closed without drainage. Posterior plaster splint applied.

During the course of the operation 20 c.c. of 50% glucose and 20 units of insulin were given intravenously by Dr. Young.

Progress record:

12/5/25—10:05 A. M. Patient awoke from anesthetic on table, drowsy all day, probably due to morphine. No nausea or vomiting. CO^2 vol. before operating 50.4, after operation 47.6.

12/6/15—This morning he is brighter and very much better.

12/21/25—Wound dressed, slight retraction of wound edges about the size of 25 cents. All stitches removed, no evidence of any infection. Crutches were not advised due to the condition of arteries, as it was thought that trauma might lead to the same trouble in the upper extremity.

When last seen the wound was entirely healed. The stump was not giving trouble.

The value of carbon dioxide combining power of blood, and chloride determinations are not generally appreciated. Almost any recent graduate would say that a simple appendectomy should not give him trouble. The following case which had such an unexpected and tragic ending may be food for thought:

Mrs. K. C.—6877, age 20. 9-16-25. Operated on September 18, 1925. Preoperative diagnosis: chronic appendicitis, retrodisplaced uterus, possible chronic cholecystitis.

Operation: Midline incision. Appendix brought into view, about four inches long. No adhesions. Meso very fat. There were several apparent constrictions, and the walls were gray. Appendix removed in the usual way. Ligation of the meso, clamp, pursestring, knife, inversion, after which the bowel was dropped back.

The patient was put in the Trendelburg position but before doing this the gallbladder was palpated. No adhesions around the gallbladder; it emptied easily, there were no stones. Right kidney was palpated, it was small, no stones could be palpated. Stomach—no adhesions. No evidence of pathology palpated.

Examination of the pelvis: Uterus was retrodisplaced, marked relaxation of all the structures on either side. Both ovaries showed small corpus luteum cysts, but there was no evidence of pathology. Tubes congested but apparently patulous. Not thickened.

A Long suspension was done and the abdomen closed in the usual way with tier sutures.

The operation presented no technical difficulties. Following operation there was a persistent tachycardia, febrile reaction (101.4). Nausea and vomiting.

Progress record:

9/20/25—9 A. M. Vomited frequently yesterday, brown fluid, everything she took nauseated her. At 10:30 a tube was passed and the stomach washed. Since then she has not vomited. Voided 18 oz. in 24 hours. Absorbed hypodermoclysis 3000 c.c. in 24 hours.

1 P. M. Vomiting greenish fluid containing some yellow substance, apparently bits of duodenal contents. Stomach washed with 5% bicarbonate solution. Patient apparently easier; less restless.

10 P. M. During the day she has vomited several times. Voided 18 oz. in 24 hours. Specimen show trace of albumin. Reaction alkalline. Few casts.

Blood taken for carbon dioxide combining power—chloride and sugar. Report, carbon dioxide 86, blood sugar 153. Chlorides 124 mg. per 100 c.c. Immediately we gave normal salt solution by hypodermoclysis; proctoclysis—glucose 2½% with 15 gms. of NaCl. Broth containing large quantities of salt. Saline solution given through Levin tube from time to time. Patient has been perfectly conscious. Answers questions readily. Takes nourishment when told. Pulse

varies from 110 to 130. Volume is better than earlier in the evening.

Blood examination—9/20/26:

Total white	21,800
Small lymphs	2
Large leukocytes	4
Neutrophiles	94

No nucleated plasmodia.

No red blood cell changes.

9/21/25—5:15 A. M. Pulse dropped from 130 to 60 during the night. Voided. Hypodermoclysis saline 1000 c.c. during night. Bowels acted, expelled large quantities of flatus and fluid given by protoclysis. Abdomen soft. No tenderness, no complaint. Mentally alert but not restless.

5:30 P. M. No nausea nor vomiting since 5 A. M. Retained cereals. Ice cream and orange juice, water. Voided 15 oz. since 7 A. M. Bowels acted well with flush. Hypodermoclysis saline 1400 c.c. Since 7 A .M. Blood chemistry:

Total non pro. nitrogen	39.9 mg. per 100 c.c.
Urea nitrogen	20.
Creatinine	1.87
Uric acid	3.32
Dextrose	153

Chlorides 389.6 mg per 100 c.c.

CO^2 combining power plasma 71.8 vol. %.

9/22/25—Temperature 103. Swelling in the parotid region, cervical and submental region noted this morning. Expectorating plugs of mucus. Negative findings in the chest. Urine 15 oz. passed. Vomited this afternoon.

9/23/25—This morning at 4 o'clock patient became more or less delirious; she could be awakened from these states, however, to talk rationally. Pulse rate 140; respiration 10; temperature 100.

11 A. M. Pulse 148; respiration 18, (breathing irregular). Pulse weak, irregular, there being a few strong beats followed by a series of shallow beats.

11:05 A. M. Patient gasping for breath, pulse still irregular.

11:10 A. M. Patient died.

The post anesthetic toxemias which were familiar pictures in the days of chloroform anesthesia are fortunately not common sequelae of the anesthetics in common use today. Many of the post anesthetic toxemias have been attributed to acidosis. Since the work of Hadden and Orr the importance to be attributed to high carbon dioxide combining power and low blood chloride has been appreciated. Blood chemistry determinations alter immediately the indications for treatment in these cases. High carbon dioxide and low chloride content is associated with a picture which we have learned to know under the name of alkalosis and these findings indicate that sodium chloride should be pushed by all routes. The reverse low carbon dioxide indicates acidosis and therefore the therapeutic indication is to push alkalies.

Alkalosis according to Hadden and Orr is evidently closely related to the chloride metabolism. They believe that "it is probably an incident in the general intoxication." They further believe that if the phenomenon of the utilizing chlorides, during the process of protein destruction be correct it seems quite possible that the phenomenon may be a protective one. On this basis they state "The provision of a sufficient amount of chloride to keep the blood level may be effective in combating the intoxication."

Can we afford to ignore so valuable a diagnostic method?

Just as laboratory workers in all hospitals are able to provide us with Wassermanns and other diagnostic tests so should they provide physiological chemistry for our surgical needs. These tests are of value in the pre-operative preparation of the poor risk, and indicate the post-operative management.

The value of these tests in the diagnosis of intestinal obstruction can only be mentioned here; suffice is to say that all of our laboratory associates should be encouraged to co-operate with us in these determinations which provide so much valuable information.

* * *

A diagnostic measure too often neglected is spinal manometric reading. The spinal manometer as a means of diagnosis

and treatment for tumors of the brain, brain injuries and spinal lesions is not used to the extent it should be. The reason is hard to explain. By its use diagnosis can be made simply and fairly accurately before the damage is irreparable. It indicates that there is an increased pressure, leaving then the treatment clear—to relieve the pressure. In the past a head injury was submitted, often unnecessarily, to a decompression operation. Today unless there is a definite depression or evidence of an extra-dural hemorrhage repeated tappings and the use of magnesium sulphate plus rest and ice bag offer the patient a much better chance for recovery.

The following cases illustrate the point in question:

Mr. F. C.—9371, age 24 years. (12-26-25.) Injury resulted from an automobile accident. When admitted he seemed mentally sluggish, not entirely unconscious. There were brush burns on the left forehead, and left cheek. Marked ecchymosis on upper and lower lid, right side. Some edema of both lids. Pupils—right larger than left, irregularity of the right pupil, some chemosis of the conjunctiva of the right eye. Right pupil doesn't react to light, left pupil reacts to light. (There is a sutured wound over the right eye just lateral to nasion. No edema of nose, evidence of bleeding from both nostrils. There is edema of upper lid and brush burns. Ecchymosis on both sides of median line. There is bleeding from the right lateral incisor alveolar cavity. No other evidence of injury to gums. No loss of alignment of other teeth. Contour of mandible normal. No ecchymotic areas about the scalp. On the right side of the midline 15 cm from the tip of the nasion there is a slight depression, the area is about 3 cm in diameter and extends backward to the right.

He moves both upper and lower extremities with apparent ease.

He can be slightly aroused, respiration is regular, not noisy.

X-ray report 12/26/25:

Structures at the region of the union of the frontal and parietal bones, in the vicinity of the fontanelle present the appearance of an unusually wide suture and in comparison with the width of the outer sutures in the skull, this is considered a separation of the suture line, or a fracture at the suture line. At no other point in the skull is there suggestion of fracture.

Progress record:

12/26/25—Blood pressure 130/90 at 12 noon. At 12:40 P. M. magnesium sulphate 1 oz. through Jytte tube.

5:45 P. M. Blood pressure 130/80. Perfectly conscious, answers questions without hesitation. Complains of headache but no nausea. Some evidence of cortical irritation as evidenced by occasional contraction. Pulse remains the same. Blood pressure practically unchanged. Spinal manometric reading was plus 27, 15 c.c. withdrawn dropping the pressure to plus 12.

9:00 P. M. Blood pressure 138/70. 11:00 P. M. Blood pressure 118/70.

12/28/25:

Operation at 8:30 A. M. as follows: Horseshoe-shaped incision with the middle of the convexity corresponding to the level of the palpable depression. (15 cm behind the nasion.) The skin was retracted downward, and the occipito frontalis muscle was cut in the opposite direction. The idea being that in the event it was necessary to remove a fragment of bone, by suturing these two in opposite directions would leave a double trap-door-like flap over the area from which the depressed fragment would be removed.

At this stage we noticed that there was a linear fracture, extending from the midline down into the zygomatic fossa. There was no evidence of depression. The serrated edges of the bone fragment were approximated, almost like a normal suture line. There was a slight bloody discharge between the bone edges, natural decompression. As there was no evidence of a depression, and there was no clinical evidence pointing to depression, other than the original palpable defect, we felt there was no indication to make a decompression. The pericranial tissues were sutured with deep dermol sutures.

6:00 P. M. No nausea since the operation. Lucid all day. Drinking freely. Bowels have acted well. Voided when bowels acted.

12/29/25—Conscious at all times. Pulse, respiration and temperature excellent. Less ecchymosis about right eye than before.

12/31/25—The right pupil does not react but less irregular in shape. Patient perfectly conscious and takes food well. Bowels acting well.

1/2/26—Read the paper and entertained visitors.

1/3/26—Taking interest in his surroundings. The wound healing very well.

1/4/26—The right eye and lid are much better. The sclera is not as congested. Has conversed during the day and seems to be free from pain.

1/7/26—The pupils were examined, the right pupil was more nearly circular than usual. There is some reaction to light of the right eye. The left eye reacts normally.

1/10/26—The eyes were examined, left reacting normally to light. The right pupil reacts to light better than it did yesterday. It is about the same in shape.

1/12/26—Patient was allowed to go home.

Comments: This case illustrates the general method of treating linear fractures of the skull. Attempts were made to reduce the intracranial pressure by spinal puncture. Spinal manometric reading at 1st tapping was 26. The fluid was clear, no evidence of blood. The pressure was reduced to 12. The second tapping was done two days later, this time reading was still 12 and therefore no spinal fluid was withdrawn.

Magnesium sulphate, 3 oz. quantity given by rectum every six hours and 1 oz. by mouth daily. Magnesium sulphate was resorted to in preference to sodium chloride, 30% solution, because magnesium sulphate is not dializable as is sodium chloride. The effect of sodium chloride, being proven by experiment, more transient, is undesirable, particularly in cases where rapid diminution of the intracranial pressure is not indicated.

No clinical evidence of depression existed but there was present on the vault about 15 cm. from the nasion a small but definite depression to the right of the midline. In spite of the fact that there was no clinical evidence pointing to depression I was afraid that since physical examination suggested this depression it would be wise to explore because of the possibility of Jacksonian epilepsy resulting from the depressed fracture acting as an irritant of the cortex.

SUMMARY.

Fractures of the skull without depression and without evidence of extra-dural hemorrhage do not need decompression.

Repeated tapping, magnesium sulphate, either by rectum or mouth, with absolute rest will usually suffice. Control spinal tappings by spinal manometer.

The value of intra-spinal readings is greatest in cases in which the real diagnosis has been overlooked originally, and where the patient is making progress towards permanent disability.

Miss C.—C-9486, age 23. 12-31-25. Old fracture of the skull. Automobile accident, October 22, 1925. Unconscious for one and one-half hours. No unconsciousness followed period of lucidity. Returned to teaching ten days after accident. Headaches have persisted from time of accident to present time. Numbness complained of on left side of face. No disturbance of vision of which patient is conscious. Unable to move neck with ease.

Examination: Pupils equal, react to light and accommodation. No injection of conjunctiva. Perfect muscle control. Pain over left zygoma and a palpable fullness. Pain over maxillary sinus. Pain on pressure over temporal bone.

Patient referred for examination of fundus. Report indicates that there is marked edema of papillae in both eyes. X-ray examination of the skull reports linear fracture of left temporal region.

Spinal tapping done. Manometic reading 26, fluid clear. Pressure reduced to 13. Specimen sent to laboratory for examination. No increased cell count. Headaches persisted. The edema of papilla seemed to increase. Three days later second spinal reading done, pressure was at that time 12, headaches persisted.

Frequent examinations indicated persistence of edema of the papillae. Because of the persistence of the headaches and edema of papillae also x-ray findings, it was deemed advisable to do a decompression. This was done January 8th. Left subtemporal decompression. Convalescence uneventful.

Patient left hospital January 18th, ten days after operation.

Since that time patient has not complained of headaches. Edema has subsided. Patient generally much better.

Observations: Injuries with persistent headaches should have a thorough examination to ascertain if the headaches are due to increased intracranial pressure. If so

relief of the intracranial pressure is indicated because of the permanent damage done to vision and the possibility of Jacksonian epilepsy.

Mr. R.—Age 46. Accident February 28, 1926. Slipped backward on truck and struck lower spine. Not immediately disabled but continued to work until March 2nd. He then consulted physician who strapped back and gave him a liniment. Ten days after accident his back was radiographed. The patient was advised to go to Touro, instead he consulted Fife Brothers (spinal masseurs). They have continued to treat him until three days ago.

Complaint: If he sits down for any length of time left leg gets stiff. He walks with difficulty on inclines and rough ground. He has "cramps" in back. No numbness nor tingling of the toes.

Physical examination: Extremities: *Left thigh and leg distinctly smaller than the right.* Below the knee the difference varies from 1½ to ½ cm. All muscles of the left leg much flabbier than right, front and back. Exaggerated patella reflex on left. Cremasteric normal.

Impression: Old fracture; spinal cord irritation.

Spinal manometric reading 28, spinal fluid examination: cell 1-2; Glob. negative; Wassermann negative; Colloidal Gold 0000000000.

Blood chemistry:

Non. pro. nitrogen	31.5
Urea nitrogeon	15.7
Creatinine	1.3
Uric acid	3.8
Dextrose	105

Following this spinal puncture patient was relieved of pain. A few days later a second puncture was done. One below the injury and one above the level of the pain. Reading above 8 and below 15.

On September 16th patient was feeling too well to be inclined to submit to surgery.

An examination of the blood on August 20, 1926, gave a negative Wassermann reaction.

Can a surgeon have greater satisfaction than that which follows the use of some form of therapy which brings comfort and apparent restoration to health and usefulness to individuals who by former measures would, in all probability, have died? Can one have more pleasure than that which follows making a diagnosis in an obscure case.

1522 Aline St.

THE LOW OR CERVICAL CESAREAN SECTION.*

HILLIARD E. MILLER, M. D.,
NEW ORLEANS.

Technically there is perhaps no simpler or more satisfactory operation than the high or classical Cesarean section, but it has a high morbidity, even in selected cases, and it is frankly unsuitable for cases in which a suspicion of infection is present. Theoretically the extraperitoneal operation is highly satisfactory, but practically it presents technical difficulties, the bladder and ureters are frequently injured, and because the peritoneum is torn in some 30 to 50 per cent of all cases, even in expert hands, it defeats its own purpose and carries with it almost as much risk for the patient who is potentially infected as does the old classical operation. The Porro Cesarean, of course, is adapted only to a very small percentage of cases and is frankly a procedure of despair. On the other hand, none of the objections urged against these operations can be advanced against the low or cervical Cesarean section, the laparotrachelotomy which DeLee in particular has done so much to popularize.

This type of operation, as we conceive it, was probably first performed by Osiander of Gottingen, in 1805, and although his case ended in disaster, it is important to note that it was his technique and not his obstetric judgment which was at fault. As DeLee says, success had to wait on more knowledge, antisepsis and asepsis had to come, pelvic anatomy had to be learned, anesthesia had to render deliberate operating possible, and surgical technique had to be developed. Once these requirements were met, as they were in the modern re-

*Read before the Orleans Parish Medical Society Meeting, Nov. 22, 1926.

vival of the operation, its results immediately proclaimed it worthy of our earnest consideration.

It has long been recognized that Cesarean section is not a procedure to be undertaken lightly. Even in selected cases the mortality runs to at least 2 per cent, and in the hands of the average operator it is above 10 per cent. Indeed, our local mortality runs considerably higher, 13 per cent at Touro Infirmary, and over 35 per cent at Charity Hospital. The loss of 2 cases on our own service, when every circumstance was favorable and operation had been done as an elective procedure for absolute indications, served to convince me that the classical operation had very grave defects, quite aside from its high morbidity and the fact that it frankly fails to meet the needs of what is possibly our greatest obstetric problem, the patient with an abnormal pelvis who has either been neglected or unwisely handled. For these reasons we began to do the low Cesarean operation, tentatively at first, then with increasing confidence, and although I have no intention of presenting to you as conclusive the 16 cases in which during the last 3 years we have used this method, they do seem to establish certain points very definitely, particularly as they are paralleled by similar results in much larger series.

To consider the technique briefly, any type of anesthesia is practical, although I have found a combination of gas and ether possibly the most satisfactory. The Trendelenburg position is always used, and a most important point is that the bladder must be thoroughly emptied, preferably by catheter. The operation may be done at any stage of labor, but the technical difficulties are less after contractions have occurred for some hours, and thorough retraction of the uterus has moved the vesico-uterine fold of peritoneum further up into the abdominal cavity. A midline incision is made between the pubis and the umbilicus, about 4 inches long, and after the peritoneum is opened, the vesico-uterine fold is identified, and a transverse incision is made, more or less elliptical, with each end turning slightly upward towards the round ligament. This fold of peritoneum is very loosely attached to the lower segment and can be easily stripped up with the gloved hand; indeed—and this is a point I have never seen mentioned, much less emphasized, in any description of the technique—it strips up well beyond the point where it is supposed to be fixed on the uterus, and I have never found any difficulty in releasing it so that it could be either stitched or clamped to the parietal peritoneum. If after this is done there seems to be any tension on the approximated flaps, it is a wise plan to insert a U suture through the fascia and muscles of the abdomen, passing through a portion of the uterine musculature and out on the opposite side, to anchor the uterus in place. Bleeding is unlikely, but if the oozing should be troublesome, the veins in the bladder fold may be clamped and ligated separately. A longitudinal incision is made into the uterine musculature down to the membranes, about 4 inches long, and with the finger the membranes are separated from the uterine wall as widely as possible in all directions. Then through a small incision in the sac the suction tip is applied and as much fluid as possible is removed before the incision is enlarged. Forceps delivery is necessary in the majority of cases, because of the preponderance of occipital presentations, and it must always be done gently to avoid extension of the uterine incision and disturbance of the visceral peritoneal flaps. If extension has occurred and the delivery proves difficult, manual rotation may be done by putting two fingers in the mouth and rotating the face anteriorly, where it is held by an assistant until the forceps can be applied. The cord is not cut until pulsation has ceased, and the placenta is allowed to separate normally and to drop down into the lower segment before it is removed, the process being hastened by 1 c.c. of pituitrin given intramuscularly just as the uter-

ine incision is made. Closure of the uterine wound is done according to the usual technique, the first layer of sutures being continuous ones of chromic 2, involving the inner two-thirds of the musculature as far down as the endometrium, which is not included, while the second layer of sutures includes the remaining portion of the musculature. At this stage the pocket formed by the flaps of the peritoneum is thoroughly sponged out and the flaps are released and re-approximated in their original relation with a continuous suture of chromic 2. The abdomen is closed in tiers in the usual manner.

The technical advantages of this type of operation are obvious. In the first place, the peritoneal cavity is never exposed to the spill which is almost inevitable in the classical operation, as the cervical operation is truly extraperitoneal. In only 2 of the cases I am reporting was the peritoneum torn, these being the first done, and the accident was due to the fact that I had not yet grasped the trick of stripping it back sufficiently far towards the fundus. Hemorrhage is always less, since the incision in the lower segment is nearly always out of the way of the placenta, so that the field is not obscured by blood, as in the classical operation, and the usual tremendous blood loss of an incision through the placenta is entirely avoided.

Again, the chances of infection are less, not only, as I have pointed out, because the peritoneal cavity is not contaminated, but because the lymphatics of the lower uterine segment are less numerous than those of the upper segment, and because the placental sinuses with all their potentialities for harm are entirely out of the way. In addition, it is an established fact that infections of the lower pelvis have a tendency to remain localized and to be less severe than similar infections in the upper abdomen, a fact which is placed on a very logical foundation by the recent work of Hofbauer on the protective phagocytic process which occurs in the broad ligaments during pregnancy. I see no basis for Brandt's contention that post-operative infections after the cervical operation are likely to be more severe because the incision is nearer the bacteria-bearing portion of the genital canal; certainly our experience in puerperal infections generally does not bear him out.

Most important of all, experience has shown that this type of operation offers a chance of abdominal delivery in cases where otherwise craniotomy would be necessary if the mother's life were to be duly considered. It has been proven in literally thousands of cases that the classical operation is a desperate chance when infection is present, and that its risk increases in proportion to the amount of cervical dilatation and the length of time the membranes have been ruptured. Large series of cases from all over the world, on the other hand, have proven that the cervical operation is peculiarly applicable to this type of case, which admittedly offers one of the gravest problems the obstetrician has to face. Baum reports 133 cases, nearly 40 per cent of them infected, with a maternal mortality of 1.5 per cent. Brindeau reports 88 with a mortality of just over 1 per cent. Hofmeir, Franz and Baisch have reported 194 cases, more than half of them infected, with a mortality of 1.5 per cent. In our own small series of 16, only 3 cases were frankly elective, and in one instance the patient was definitely infected from a 24-hour labor before admission, during which frequent examinations had been made and delivery several times attempted, yet our mortality was 0, as compared with 2 deaths in the last 16 classical operations, both of them in elective cases, from acute dilatation of the stomach, a contingency which no amount of obstetric judgment or surgical skill could have avoided.

The convalescence after the cervical operation is also smoother than after the classical operation. In spite of the fact that in our cervical series only 3 cases were frankly elective as compared with 10 in

the classical series, in the cervical group the temperature elevation was less acute and less prolonged, in no instance was the post-operative vomiting annoying—it usually amounted to little more than the emesis of undigested food immediately on awakening from the anesthetic—and in not a single instance was distention a feature.

As to the chance of rupture of the scar in the cervical operation, theoretically I would say that it is less. Because the wound is in the lower uterine segment and out of the active contractile area, the sutures are less likely to be disturbed, the chances of extravasation of the lochia are therefore less, the possibility of adhesions to the omentum and intestines is remote, and a stronger scar should undoubtedly result. The incidence of rupture after the classical operation is usually figured at about 4 per cent, although King has pointed out that is figured on the patients who are permitted to attempt natural delivery, which after all is the only real test, it rises to 18 per cent. Our figures for the cervical operation are not yet complete, but in the only set which I have at hand, Wetterwald's, the gross incidence of rupture for 3,600 operations performed in the leading clinics of the world was 10, less than .003 per cent, a result which I do not believe the figures for the classical operation could excel. I might add in this connection that the cervical operation is never suitable for cases of placenta previa, not only because of the immediate dangers, which are obvious, but also because the scar in such cases, as more than one writer has pointed out, becomes a locus minoris resistentiae.

I can see no basis whatsoever for the claim that the cervical Cesarean section endangers the life of the child. Admitting that the difficulties of extraction are slightly greater than they are in the classical operation, in no instance are they such as to threaten life, and I have never seen more difficulty in establishing respiration in these babies than in those delivered by any other type of abdominal section. Indeed, because the head is delivered first, I should be inclined to say that the risk is less. All of the babies in both our series were born alive, and I might add that I have never seen a case in which I considered Cesarean section justified if it were known beforehand that the child was dead.

As to the objection that adhesions make a second operation of this type difficult and sometimes impossible I cannot speak from personal experience. In a series of 201 cases collected by Wetterwald, 11 were subsequently delivered by a second cervical operation without difficulty, and theoretically I can see no reason why the procedure should not be perfectly feasible. I have made it a point to examine carefully each of my patients at the end of 2 months, to note whether there was any degree of fixation from adhesions or disturbance of the mobility of the uterus, and as far as I could make out from bimanual examination, conditions were perfectly normal. One of the patients in the series is at present nearly at term and a second Cesarean will be necessary, so I am awaiting with interest the outcome of the case, as it will be my first opportunity to study at first hand conditions within the abdomen after this type of operation.*

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*Since this paper was written, the patient referred to in the last paragraph has been delivered at term by a second cervical Cesarean operation. The only adhesion noted was a single very thin attachment of the omentum to the abdominal wall just beneath the scar. The peritoneum did not strip back quite as readily as at the first laparotomy, but in the ordinary case this would have made small difference; in this case it rendered rather more difficult the extraction of the child, who was lying transversely and who was quite large. The convalescence was rather less smooth than is usual after this type of operation, but even at that the patient's condition never caused any anxiety, nor did her temperature ever go over 101. She was discharged twelve days after her delivery, and at the present writing is completely recovered.

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DISCUSSION.

Dr. E. L. King: The main thing I can say is simply to corroborate the statements of Dr. Miller. I have used the low Cesarean section in quite a number of cases at Charity Hospital, but cannot say definitely how many, employing it in the very type of case in which we learned by bitter experience not to use the classical operation.

As Dr. Miller mentioned, the mortality following the classical operation has been high. I collected the figures up to the beginning of 1921, in 1922, and out of 117 Cesarean sections there were forty-one maternal deaths, a very high percentage. Of these forty-one maternal deaths twenty-five died from the disease for which the operation was performed and the other sixteen from infection. In a series of 117 cases, sixteen deaths from infection is certainly entirely too high. Since then we have been cutting down on the percentage of Cesarean sections. I am working on those figures now, but am not prepared to say what they show, yet I know that we have been doing fewer classical Cesarean sections and have been restricting our indications. Cases that were infected, with the membranes ruptured, we have delivered the best way we could, vaginally, believing it was better for the baby to run the risk than the mother, and we have lost babies that might have been saved by low section. Since the low section has been developed I have performed it where the classical was contra-indicated and have in such cases lost neither mother nor baby; this is certainly a step in advance.

The question as to the technical difficulty of the operation is something to be considered. It is more difficult that the classical Cesarean—in fact, there is hardly any operation more easy than the classical Cesarean; one reason for its popularity—it is easy and spectacular. The low takes longer and is more difficult, but that is no excuse for resorting to the more dangerous method, no more than in any other form of surgery should we fall back on the easy when the difficult is indicated. Everyone doing operative obstetrics should familiarize himself with this type of low operation, and particularly with the indications. The classical is safe before labor has started, before infection, before membranes have ruptured. We should all know the indications and contraindications of the classical operation. We can stretch these indications for the low and use it where the classical is not indicated. Men who handle these cases should be prepared to do this operation in a case of potential infection, where the membranes are ruptured, when labor has lasted for several hours, all of which make the high operation hazardous: in these cases the low operation is safe and we can succeed with it where the high operation would be entirely too dangerous for the mother.

Dr. F. M. Johns: Do you take definite precautions to prevent the dissemination of endometrial transplants into the wound?

Dr. Hilliard E. Miller (closing): In answer to Dr. Johns' question, we have no means of avoiding absolutely the endometrial transplants. Fortunately instances of transplants have been extremely rare. I can recall in the literature only three or four having been reported in the scar of the abdominal wall following Cesarean section. If the low Cesarean is done with the flaps properly attached and intact there is less likelihood, of course, of endometrial transplants inside the peritoneal cavity.

Time should not be a great factor in doing a Cesarean section. There is no actual hurry, and if pains are taken considerable blood can be saved the patient. The manual extraction of the placenta immediately after the cord is cut is not a good procedure. The edges of the incision in the uterine body may be clamped with hemorrhoidal clamps to compress the sinuses until such time as the 1 c.c. of pituitrin, which was previously given, has had time thoroughly to contract the uterus and separate the placenta. It then drops into the lower segment and can be lifted out.

In conclusion I would like to say that I advocate and urge that the low cervical Cesarean section be done preferably to the high classical type whether in elective cases or those where there is a suspicion of infection.

ETIOLOGY, DIAGNOSIS AND PATHOLOGY OF HODGKIN'S DISEASE.*

JOHN A. LANFORD, M. D.,

NEW ORLEANS.

In 1832 Hodgkin described a series of seven cases characterized by presenting in common a symptom complex, of widespread enlargement of the lymphnodes of the body, an increase in the size of the spleen and liver, anemia, cachexia and death. He

*Read before the Louisiana State Medical Society Meeting, Monroe, April 15-17, 1926.

called attention to a clinical syndrome rather than to a definite pathologic entity.

Virchow in 1845 divided the group into the leukemic and aleukemic varieties, when he described the leukemias and Kundrat in 1843 further separated the aleukemic subgroup by describing lympho-sarcoma. Wilks in 1856 collected 15 cases and perpetuated the name of Hodgkin's Disease to the clinical syndrome but it was left Sternberg in 1898 and Reed in 1902 to describe the histopathology of the condition which is now recognized as Hodgkin's Disease. During that interval, 1855-1898, many cases of this disease were reported under a variety of names, among them being lymphadenoma, malignant lymphoma, lymphogranulomatosis; malignant granuloma and pseudo-leukemia. This produced a great deal of confusion in the mind of the medical man.

There are great differences of opinion even today as to the nature of the pathologic process which Rolleston has grouped into four divisions.

1. An atypical form of tuberculosis.
2. A specific infectious granuloma.
3. A new growth or neoplasm.
4. A transition between a granuloma and a new growth.

ATYPICAL FORM OF TUBERCULOSIS.

A consideration of the clinical course of Hodgkin's Disease reveals many symptoms in common with glandular tuberculosis and the gross appearance of the removed glands also have points of similarity. Carl Sternberg considered the condition a special form of glandular tuberculosis just as lupus is a special form of tuberculosis of the skin and obtained evidence of tuberculosis in a large percentage of his cases. Inoculation experiments have given varying results sometimes positive, sometimes negative but it is probable that the positive results were due to a mixed infection and while this interpretation seems convincing, it has not been universally accepted. Frankel and Much using the antiformin method have demonstrated a granular form of bacilli in a number of glands of Hodgkins' Disease free from the structural changes characteristic of tuberculous adenitis which they believed to be tubercle bacilli but their work has not been generally accepted.

Another argument in favor of the tuberculous origin is that some of the cases of Hodgkin's Disease may terminate as generalized tuberculosis but this occurrence may be explained by the fact that the presence of Hodgkin's Disease favors tuberculous infections or activates it when latent. Further it is not the usual termination of Hodgkin's Disease.

SPECIFIC INFECTIOUS GRANULOMA.

Reed, Longcope and others agreed that Hodgkin's Disease is an infectious granuloma but denied that it was tuberculous. Various organisms have been described as being responsible for Hodgkin's Disease but none can be regarded as proven among them being a Protozoa, (Bramwell) and a spirochete by (Proescher and White): Delbet, Eberson, Young, Billings and Rosenow have all described a bacillus but Bunting and Yates have been the most ardent champions of a gram positive pleomorphic diptheroid bacillus which they isolated from all their cases of Hodgkin's Disease and with which they claimed to be able to produce the early histological lesions in animals by inoculation: That they could isolate this organism from all cases was proven by many workers, among them the author, but the production of lesions in animals has not been confirmed.

NEW GROWTH OR NEOPLASM.

The view that Hodgkin's Disease is a neoplasm has many champions, among them being Gibbons, Clarke, Coley, Oliver, Mallory and Warthin. Mallory classes the condition as a lympho-blastoma of the slowly growing scirrhus variety. The type cell is a lymphoblast which occurs in some tumors as cells of large size, with large lobulated or multiple nuclei which arise

by mitosis. Sometimes the tumor cells arouse a marked reaction on the part of the fibroblasts so that the latter multiply exceedingly as they do in certain forms of carcinoma. This noticeable increase in the slowly-growing scirrhus type of lympho-blastoma. At the same time there is often an abundant infiltration with eosinophiles and plasma cells. The distinguishing feature is the presence of tumor cells, often in small numbers which are different from any cells found in chronic inflammatory processes. Against the neoplastic nature it is argued that it is not uncommon in Hodgkin's Disease for the lymph glands to become rapidly enlarged all over the body, while a tumor begins at one place.

TRANSITION BETWEEN GRANULOMA AND A NEW GROWTH.

The view advanced by Symmers that Hodgkin's Disease is a transition between an inflammatory formation and a neoplasm is due to the fact that it has characters of both processes. Levin also looks upon it as a borderline condition between inflammation and malignant tumors. It is differentiated by the fact that it is a system disease affecting the entire lymph-hemolytopoetic apparatus.

The great confusion which exists regarding the nature of Hodgkin's Disease is due largely to our ignorance of its etiology. There are however certain facts which we possess which are herewith presented.

Etiology: Hodgkin's Disease is distributed widely throughout the world, cases being reported from all countries and all climates.

Race does not appear to be a predisposing factor although the negro in the United States constitutes only a small proportion of the cases seen despite the fact that they show a high mortality to all forms of tuberculosis. Bunting reports the "Jewish race would seem to show a somewhat heightened susceptibility." All authorities agree that the condition is more common in males and Desjardin in reporting 135 cases in the Mayo clinic found the disease 2.3 times more common in men.

It may occur at any age, Fabian reported a case in a 5½ months old child and Fazio reports a case in a patient 76 years of age. My experience coincides with Bunting's, who found that the third and fourth decades showed the greatest incidence of the disease.

Pre-existing local disease has been assigned as a predisposing factor by some authorities and others attach significance to a history of malaria, syphilis, pneumonia, etc., but satisfactory evidence has not been produced to prove that any of them can be considered as an etiologic factor.

Various writers have demonstrated in stained sections of Hodgkin's glands small bodies suggestive of protozoa, among them being Kofoid who claimed to have found amoeba. He attached an etiologic role to them, despite the fact that the patients were suffering with amoebic dysentery and the lesions in the lymphnode was not accompanied by the usual local reaction produced by the amoeba in other organs and tissues, viz., formation of pus.

The significance of bacteria in lymph-glands is not easily determined, but the mere presence of any particular type of micro-organism in a diseased tissue is not ipso facto proof that that organism is the cause of the disease. A number of different species of bacteria have been isolated from Hodgkin's glands and assigned an etiologic role but only two types have received serious attention, namely the tubercle bacillus and the group of diphtheroid organisms called bacillus Hodgkini.

That tuberculous infections are widespread is well known and it is not surprising to note that 20% of the cases of Hodgkin's Disease show tuberculous changes somewhere in the body, and in 10 to 20% of the cases tubercle bacilli are present in

the affected gland (Zeigler) producing the typical histologic changes characteristic of tuberculosis in addition to the picture of Hodgkin's Disease. The susceptibility of guinea pigs to tubercle infection has been used to separate the two conditions. A number of authors have been unable to produce tuberculosis in animals (guinea pigs) by injecting them with pure Hodgkin's glands (Reed, Longcope, etc.).

Further a consideration of all available data warrants the conclusion that while tuberculosis of the lymph glands and Hodgkin's Disease have certain characteristics in common and while tubercle bacilli are occasionally found in Hodgkin's glands it has not been proved that the tubercle bacillus is the essential etiologic factor in Hodgkin's Disease.

The part played by a group of pleomorphic organisms isolated from the glands of Hodgkin's Disease and given the name of B. Hodgkini by Bunting, was the subject of much study and investigation about 10 years ago. An etiologic role was claimed by some especially as the organism could be isolated from every case. Bunting and Yates reported the production of the histologic changes in lymph glands and a characteristic blood picture in white rats, rabbits and monkeys by the inoculation of pure cultures of the organisms. However their work was not confirmed and the finding of similar diphtheroid organisms in every form of pathologic lymph-adenatous structure by the author and other work has tended to cast doubt on the etiologic significance of the bacteria.

It is therefore evident that the identity of the existing cause of Hodgkin's Disease has not been proven and it is the author's opinion that no known bacterial or protozoal structure plays a part in the production of the disease.

DIAGNOSIS.

The diagnosis of Hodgkin's Disease cannot be positively made by a consideration of the clinical syndrome alone and depends entirely on the histological picture. It is therefore necessary to excise an affected gland for study. Such a gland shows histologically a diffuse mass of cells of several types replacing and infiltrating the normal structures. These cells are partly inflammatory and reparative and partly neoplastic and vary in numbers in different parts of the same sections as well as in the stage of the disease. The characteristic cell is a large flat body with a pale staining cytoplasm, somewhat scanty in amount, having one or more large nuclei with well defined outline and a reticular network and one or two chromatin masses. These cells are commonly spoken of as Dorothy Reed cells. In addition there are endothelial cells, large and small lymphocytes, eosinophiles and neutrophiles, occasionally, and fibrolasts.

There are recognizable three stages of development of the lesions which can be demonstrable in different parts of the same lymphnode.

1. A simple hyperplasia of the lymphoid element—at this time it is impossible to determine the probable course or nature of the process.

2. The formation of a polymorpho-cellular granulation tissue composed of endothelial cells, mononuclear and multinuclear giant cells, fibroblasts, eosinophiles and occasional areas of necrosis.

3. Hyaline fibrous induration with the result that at times it is impossible to recognize the true nature of the condition.

The characteristic cell is a giant tumor cell which can be easily distinguished from the Langhans type of giant cell seen in tuberculosis. Both types of giant cell may be seen in the same lymphnode. The number of these cells varies in different glands and different areas of the same gland. They occur singly or in groups and in the late stage of the disease these cells may be seen lying in clefts in the dense fibrous tissue. The origin of these cells is attributed by Reed, to endothelium, by Symmers to the

bone marrow and by Mallory to the lymphablast. In view of the most important facts in the disease it is most probable that Mallory is correct.

PATHOLOGY.

Hodgkin's Disease is primarily an affection of the lymphatic glands usually beginning in one group and ultimately involving most of the other lymphadematous structures of the body. According to most authorities the cervical glands are most frequently involved.

It is an interesting fact that the lymph glands of the abdomen, thorax, neck axilla and groins and the auxillary systems of the lymphoid tissues including the spleen and liver bear the brunt of attack while the lymph follicles of the intestines and urinary system nearly always escape.

The extension of the disease from the primary focus is by way of the lymph stream to the next group of glands in the course of the flow of lymph. It is probable that the blood stream plays but little part in the dissemination of the condition.

In most cases the glands are discrete and not adherent to each other or to the overlying skin but occasionally the capsules become infiltrated and the surrounding structures involved by the new growth. The most extensively massive forms occur in the mediastinum and retor-peritoneum.

The spleen is involved in a large per cent of the cases and occasionally may be considered the primary site of the condition.

The liver is frequently involved, resulting especially in enlargement and jaundice. The gastro-intestinal tract may be affected. The lesions which occasionally occur in the lungs are true tumor metastasis.

Anemia is a constant feature, is of secondary type and usually of gradual progress. The white cells vary in number and percentage and cannot be relied upon as a constant diagnostic point.

Death always occurs.

SUMMARY.

Hodgkin's Disease is a known clinical and generally accepted pathologic entity whose excitant is unknown, but whose course and universal fatal termination warrants the opinion that it is neoplastic in nature.

DISCUSSION.

Dr. W. D. Haggard (Nashville, Tenn.): I think this is a very interesting topic and I, personally, have been much profited by the presentation of such a paper. It does not, of course, take us into the realms of treatment and unfortunately our treatment has been most unsatisfactory. This is one disease in which I think we have been more handicapped than in any other. We are familiar, of course, with the work of Yates, who has made very widespread sections of the gland and followed it by intensive radiation. That has in some instances presumably effected a cure. The question comes up as it does in pernicious anemia, Was it the real thing?

The next idea, in the management of this disease, the effort of palliation would be about all one could hope for, and coming back again to the diagnosis, I believe the essayist was correct when he was able to differentiate from the common types of adenopathy. I believe our errors have consisted largely in thinking of the more frequent types of tuberculosis and the adenopathy of syphilis. If one, however, will be on one's guard and hesitate before removing a single group of glands of undetermined origin and follow the precept of one of the speakers in the tuberculosis question and give a little time, he will often be, unfortunately rewarded as far as the diagnosis is concerned, by seeing multiple glandular enlargements that will at least verify the diagnosis.

Dr. D. O. Willis (Leesville): Mr. Chairman and Gentlemen: This subject I might say is of unusual interest to me because of the fact that in 1914, the early part of the year, a diagnosis of Hodgkin's disease was made in my own son. Of course, now, the scientific man will question that diagnosis because of the result obtained but I hardly think we are justified in questioning the diagnosis.

Dr. Ellis of Shreveport first made the diagnosis of a typical Hodgkin's picture from a gland removed from the right groin. About a month or six weeks later, Dr. Wade of New Orleans, taking a gland from the left axilla, made the same diagnosis. His diagnosis was concurred in by Dr. Bass and Dr. J. B. Elliot, Jr., of New Orleans, after careful study of the case from every angle—

tuberculosis and every other condition, that might be connected with such a condition.

I then took him to Chicago and Drs. Billings and Rosenow concurred in the diagnosis after a study of the case. Then I went to Milwaukee and Drs. Yates of Milwaukee and Bunting of Madison concurred in the diagnosis after a thorough study of the blood and the case in general from every standpoint, and Dr. Yates began the treatment of the case in the summer of 1914. As Dr. Haggard has just mentioned radical removal of glands from the various sections where they were infected, was done and radiation almost to the extreme, and the use of a serum.

Dr. Yates at that time was looking on Hodgkin's disease as probably being due to a diptheroid bacillus, and he was using immunized horse serum. He was looking on five different strains of the diphtheroid bacillus as being responsible for the five different types of the disease he was classifying at that time.

I was there about four and one-half months with them, in the summer and fall of 1914, and I saw a large number of cases. Many of them had been under their care and treatment for as long as seven and eight years and appeared to be well. They treated my son and I returned with him for two years, at six months intervals, and some treatment was given after that, especially radiation and one bunch of glands removed after the first year.

On April 1st in 1916 he was pronounced to be normal in every way, blood picture and everything, excepting for the extreme loss of tissue that he had suffered, and I am glad to tell you that today he is perfectly normal so far as we are able to determine. We are having him watched, of course, carefully with the dread of what may happen in the future, but he is perfectly normal so far.

Dr. Grant E. Ward (Baltimore, Md.): We have had about 200 cases of Hodgkin's disease at the Kelly Hospital in the last twelve or fourteen years and Dr. C. F. Burnam is reporting these cases in Dallas next week. I am glad to confirm what Dr. Willis said regarding cures in Hodgkin's disease and to add that we have some cases that are well after seven to eleven years. I don't agree with what has been said about this disease being incurable.

Our treatments consist chiefly of radium, although we have used deep therapy x-ray in some cases. We feel that radiation with gamma-ray of radium is preferable.

The percentage of five years cures is small but we do have, considering the number of cases, a very appreciable percentage; in all types combined an average of 17%.

Dr. Lanford (in closing): I wish to thank the men who discussed the paper for their consideration. I have very little further to add. I think that the point brought out by Dr. Haggard that time is very important and will frequently make the diagnosis for us if a gland is not removed is a good one, as it is not always necessary to remove a lymphnode for the conclusion that the condition is one of Hodgkin's disease, although the histological study is our only means of making a positive diagnosis.

The point that I made with reference to the general end of these cases of Hodgkin's disease, that is death, is based entirely on the fact that I consider it a true neoplastic condition, and just as we look upon cancer and sarcoma as resulting fatally in practically 100 per cent of the cases, so we feel that Hodgkin's disease is in the same group. Of course, certain cases may possibly be cured or their lives lengthened by proper treatment whether the treatment is surgical, medical or physical.

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A NEW "NEW" IN NEW ORLEANS*

MERLE THORPE

Editor, Nation's Business

Still as French as the savory dish of *bouillabaisse,* still as Spanish as a flower-decked patio, the proud old town of New Orleans is now putting heart and soul into a major course in commercial and industrial Americanization. In the shimmering crescent of the great river is rising a new city, a city packed with marvels a-plenty to applaud the ancient wisdom of Indian settlers who named the original site, Tchoutchouma, "the place of the sun." On view every day to charm the traveler's eye is a spectacle of transformation as magical as any Mardi Gras pageantry ever paraded from the fairy realms of Rex, Comus, Momus or Proteus. Always the charming and vivacious "mistress of the Mississippi," this renascent New Orleans is setting a style for American cities. And nowhere has a reasoned progressivism found a more fascinating trimming of romantic antiquity.

Long famed as a dispenser of "cotton, cane and cocktails," the new New Orleans has expanded that celebrated trinity of commerce to nine hundred products, the output of a thousand mills and factories. In the streets, in stores, in offices, in clubs, on the docks—everywhere—a buoyant civic spirit is weaving its spell of enterprise. In this tremendous glorification of faith with works, the city has put its water-borne commerce into second place by the enormity of its tonnage; it has increased its bank resources to $330,509,000; it has raised the total of its building and loan resources to $86,520,000; it has pushed up the total value of its manufactures to $400,000,000 a year; it has undertaken developments, improvements, and municipal projects, estimated to cost $250,000,000.

Whatever the significance of the decadent cocktail, there is no mistaking that the city thrives on water. From the days of Bienville river men and saltwater sailors have given color and character to life in New Orleans. The oyster luggers still ply their ancient trade, quaint craft still churn the placid waters of the bayous, and boats there are to vitalize the tradition of the *Natchez* and the *Robert E. Lee,* but into the picture have also come huge steamers with foreign flags, and squat tow boats with freighted fleets of ponderous barges. For nearly fifteen miles the harbor works fringe the broad arc of the Mississippi, from Westwego and Southport on the northwest, to Chalmette, five miles below Canal street. Connecting the inner harbor and Lake Pontchartrain, on the north, is the twenty-million-dollar ship canal. Southward, one hundred and ten miles, lies the Gulf.

With increasing use of this convenient layout of waterways a few steps from capacious warehouses, New Orleans has become a livelier distributor and forwarder of goods to and from the prosperous trade empires tributary to the vast Mississippi basin. On her wharves are piled the varied products of fertile western plains, and of prolific eastern and southern workshops. From abroad, last year, she received about 4,800,000 tons of commodities, and to the world she sent 3,800,000 tons of goods. By value, the first ten imports in the order of magnitude were: coffee, cane sugar, burlap, sisal fiber, crude petroleum, bananas, gasoline and naphtha, molasses, sodium nitrate, and creosote oil. Among

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SOUTHERN BAPTIST HOSPITAL, NEW ORLEANS.

the exports, by value, the first ten were: raw cotton, gasoline and naphtha, wheat, leaf tobacco, wheat flour, lard, kerosene, yellow pine boards, corn, and gas and fuel oil. Rated by tonnage, petroleum got first place in imports and in exports. Sugar and molasses, together, stood second, and bananas third in imports, and wheat and lumber second and third in exports. Cargo manifests of freighters bound for the Spanish Main are itemized reminders that New Orleans is "the grocery store of the Caribbean."

With the United Kingdom and continental Europe, exports, chiefly petroleum, cotton and grain, have been predominant. But with the West Indies, Mexico, and the east and west coasts of South America, imports have outdone export cargo because of the hold-filling import orders of raw sugar and molasses from Cuba, oil from Mexico, bananas from Central America, coffee from Brazil, and nitrates from Chile.

In expanding the business of any part good transportation is decisive. One answer to New Orleans' forward surge is that she has it. She wanted it and her business men went out and got it. Ten trunk line railroads and ninety steamship lines are at her service. Their terminals are linked with a public railway. On the loop of this line cars are shunted to rail or steamship sheds for loading or unloading. That belt line is the tie that binds the throbbing circulatory system of the busy port.

Of the port and its possibilities, the United States Board of Engineers for Rivers and Harbors says:

"The port of New Orleans is rendering valuable service in facilitating the foreign and domestic trade of the nation. It is well situated to become of ever increasing value as the interior of the country becomes more densely settled, and as the consuming and producing ability of its

TOURO INFIRMARY, NEW ORLEANS

enormous hinterland increases correspondingly. The progressive attitude of the Board of Harbor Commissioners and of the local commercial interests gives splendid assurance that New Orleans will be found prepared at all times to meet the demands which the requirements of American trade may impose upon it."

Rail freight handled at New Orleans has climbed to the eye-filling total of more than half a million carloads a year—about three-fifths incoming, and about two-fifths outgoing. In rail freight received, grain and grain products, logs and lumber, mineral oils, cotton, coal, coke and charcoal, sand and gravel stand up highest. In rail freight forwarded, bananas, sugar, syrup and molasses, mineral oils, coffee, automobiles and parts, and lumber would make the biggest heaps.

From acetylene gas to yeast is the broad range of local products—in volume and variety enough to gladden the heart of any freight agent. Over the radio New Orleans has told the world about "the world's largest single unit sugar refinery; the world's greatest cane-syrup canning plant, and the only mill turning sugar-cane waste into insulating lumber at the rate of one million feet a day"—and of "rice mills, oil refineries, summer clothing factories making 80 per cent of the wash suits worn by American men, and other industries of infinite variety."

NEW INDUSTRIAL HARBOR.

In substantial evidence of the new impetus to manufacturing and merchandising stands the pretentious industrial harbor development, now offering industry and commerce leased or privately-owned sites and facilities on a siltless, currentless harbor. Distinctive, too, is the International Permanent Trade Exhibition, housed, rent free, in the Army Base building. Established as a permanent display of raw and fabricated products, this non-profit, co-operative exhibition was encouraged by the United States government, banking, industrial and trade organizations, the State of Louisiana, and the city government.

Inspired deve'opment is the order of the day in this lusty rejuvenation of the old river town—a sight to put a seal of reason on DeSoto's belief that the river contained

JOHN DIBERT MEMORIAL, HOTEL DIEU, NEW ORLEANS

the essence of youth. So sudden have been the intimations of this new vigor that citizens share astonishment with visitors. Before their wondering gaze is spread a modern metropolis with its paint and plaster hardly dry for skyscrapers, hotels, apartments, and other new building ventures have quickly taken firm root in this friendly soil and now pillar a skyline that induces exclamation and stiff neck.

Belated discovery that a Southern exposure in the South is no more sultry than in the north assured the building of apartment houses, even age-mellowed mansions have been converted into apartments or razed to make place for hotels. It may be that the South is developing a servant problem, but the trend toward apartments seems only an expected attribute of urban life.

For this New Orleans two new bridges over the Mississippi, and one across Lake Pontchartrain, are planned. On these long spans to compress distance to the north, east and west, $25,000,000 will be spent. On the Lake side, a five-mile, mosquito-plagued strip is being reclaimed to make an inviting beach and residence section. This bit of municipal magic, which adds another beauty spot to the city, will be performed at an estimated cost of $27,000,000.

MOTORS MADE GOOD ROADS.

In these improvements the motor car is an accelerating factor. New concrete and gravel roads are open to all parts of the north and east—a direct run from New Orleans to Winnipeg, a distance of 2,400 miles, can now be made in a little more than a week. Bad roads and detours have had their day in much of the South.

For magnets to populate all the new construction there is a fascinating wealth—the sprightly institution of Mardi Gras, the rich stakes of the winter race meet, the primitive allure of rod and gun, the lordly sport of yachting on the Lake, the captivating stretch of coast from New Orleans to Mobile—"the Riviera of America"—with its pleasant resorts of Waveland, Bay St. Louis, Pass Christian, Mississippi City, Long Beach, Ocean Springs, Gulfport, Biloxi, Scranton, Pascagoula, bright spots to garland any holiday for luxurious loafing. But underneath the gay froth of amusement for the care-free visitor is the sound

structure of the city's industrial life, giving the steady employment that establishes homes and helps business to keep on keeping on.

It would have been pretty easy for New Orleans to have been a weed—and the fact that she's flowering attests the vision and sound judgment of the men who have raised her. In this cultivation her business men have been prompt to lend a useful hand. Working through the Association of Commerce they have helped to train the city in the way it should grow. The seeker after New Orleans truth will find the record of their public service in the creation of a city planning and zoning commission, in the well-paved streets, in the bright lights that shine on Canal and St. Charles Streets, in the Jefferson Highway from New Orleans to Winnipeg, in the clearing-house for local charities, in the saving of a $300,000 gift to the city for a tuberculosis hospital, in the restored steamboat service on the Red and the Ouachita Rivers, in the morning glory vines that cling to telephone poles—in things for the good of the order.

So the city works and plays, a great book of life, divided into two parts by the bustling thoroughfare of Canal Street—a sort of Old Testament on the north, a sort of New Testament on the south.

On the "downtown" side is the Vieux Carre, the French Quarter. There Creole customs endure. There balconies overhang narrow streets, and French is still spoken. There are the weathered landmarks to give romantic substance to the deeds of Jackson, of Lafitte, and of O'Reilly. And though "many of the foremost families of France brought with them thousands of articles of art, virtu, and embellishment of the nobles and their followers," there is "no factory making New Orleans antiques."

A NEW CITY SPRINGING UP.

On the "uptown" side is the new city, growing with dynamic pace and push—too purposeful and restive to sit for its portrait.

New Orleans is all things to all men. She provides a spicy seasoning according to taste.

Perhaps it is all because of the *gumbo Nouvelle Orleans,* or the Association of Commerce, or the galvanic civic spirit, or the warm southern hospitality, or the balmy climate, or the old habit or giving *lagniappe* to customers, or a combination of all these pleasant solvents of perplexing probems—but whatever the ingredients or their proportions in her success, New Orleans has contrived to find a place in the sun.

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As long as all that is said is said against me, I feel a certain sublime assurance of success, but as soon as honied words of praise are spoken of me, I feel as one that lies unprotected before his enemies. —*Emerson.*

TRAFFIC SIGNALS.

RED LIGHTS—STOP. GREEN LIGHTS—GO.

Progress and the necessity for rapid advance have forced traffic signals upon us. What chaos and disaster would follow the failure to observe the red and green lights?

Every doctor has a window in his office, facing the intersection of Medicine and Progress Streets. Daily and I may add, all through the night, the traffic is kept busily moving in each direction. Old Daily Grind, the officer in charge of the traffic signal, is preparing for his week's vacation, which starts this year on April 25th.

Annually at this time, Daily Grind feels the urge of Spring; the chirp of the cricket, the song of the birds, the smile of the young, make work impossible. Duty becomes a task. He scratches his head, yawns and wonders what it's all about—when lo! presto! he sees his relief officer coming up the street to blow the whistle and swing the lantern. With a gay and light-hearted swagger, the young and smiling Officer State Convention advances.

Officer State Convention, who makes the traffic hum. Spirited, full of life, smiling and pleasant, he swings his lights and blows his whistle to go. A green light, up Progress Street whizzes the traffic. No laggards now. Everybody shoots along at top speed. But no! there is one laggard who stays behind. Hey! you, don't you see the Green light? Come, move along. Speed it up, or you'll be put in the jail of Stagnation, where you'll never get out.

Officer State Convention turns to old Daily Grind, pausing with his hand extended over the light switch, "Sure enough, Grind, old man, these fellows that delay the traffic are getting to be fewer and fewer. Why, I can remember a few years back when the Stagnation cells used to bulge out. Now it's mighty few that'll not have their engines racing when I stretch my arm."

"Sure," said old Daily Grind, adjusting his cap, "and why shouldn't they? You've got the best of the beat; you're only on for a few days and you've got what they want. I'm an old institution; I am here all the time; the boys all know me, that's what makes them careless."

Officer State Convention waved his white-gloved hand to the President of the Medical Society, who whizzed by: "It's

boys like that who keep the traffic moving on Progress Street. That lad and his crowd do more to keep the cells of Stagnation empty than all the cops. Those boys are sure enough drivers. No congestion on the trial behind them. They keep Progress Street open for traffic from Medicine Street to Success Avenue."

Old Daily Grind, dusting some of the accumulation of time from his chest, with the back of his hand, pushed his cap back and started slowly away. Hesitating, he let fly a final rebuff to Officer State Convention, "Well, you'll only have them for a week anyhow. After a week, I'll be swinging them along again. Sure, they're only human after all."

DR. HUNNER.

The recent honor conferred upon Dr. Guy L. Hunner, of Baltimore, in electing him president of the Southern Surgical Association, at the annual meeting of that body in Biloxi, is a most fitting tribute to one who has advanced gynecological urology to the dignified plane it now occupies. Further, his election records the recognition Dr. Hunner so justly deserves for his having brought to our attention the importance of searching for ureteral stricture in all cases of obscure abdominal pain. Only one with a tenacity of purpose, such as he possessed, could have weathered the years of ridicule he has so patiently endured in order that the profession he loved might ultimately see the light.

It is not however alone to the discovery of ureteral stricture that we are indebted to Dr. Hunner. Years ago he described a new type of bladder ulcer found in the vesical vertex, which has been given his name. The Association is to be congratulated upon their choice in the selection of their new president and we of the South rejoice that such signal honor has been paid him.

OUR "HEROIN RESOLUTION."

The caption to this editorial is apt. It will be remembered that the House of Delegates of the Louisiana State Medical Society unanimously passed the resolution calling upon Congress to repeal the act which proscribed heroin and eliminated it from our therapeutic armamentarium; said resolution was then unanimously endorsed by the whole society, in adopting the report of the House of Delegates on the last day of the Monroe meeting; therefore, as far as the Louisiana Society is concerned, it *is our resolution.*

The main reason for this action is, as stated in the preamble of the resolution, that we believe that Congress acted too hastily in depriving us of such a valuable drug (for which we have no substitute) in medical and surgical practice; this action was taken in face of the fact that no less an authority than Dr. Carleton Simon admits that the narcotic evil is 98% a police problem and only 2% medical; clearly, then, physicians and surgeons are being deprived of this valuable aid in order to protect 2% heroin addicts from their vices, whereas the 98% will continue to get their supply unless prevented by other means. But, behind all this, there is a far greater reason for pressing this matter; it is the evil of centralized government, the overriding of local and state authorities by the national body, in the role of regulators of our morals, but in this instance, impinging upon the usual method of practicing medicine according to the dictates of reason and judgment and substituting therefor a system of practicing by law—indeed, the time may come when those intending to practice medicine will be sent to a law school to learn all the limitations and regulations rather than to a medical college! But, seriously, if Congress listening as it does to the radical reformers, sees fit to proscribe heroin, because a relatively high percentage of heroin-addicts were found in the East, who knows but what, next time, they might step a little further and

exclude morphine from our supply of drugs, because someone may find a relatively high percentage of morphine addicts in the West!

We must fight for our rights. Unfortunately, the medical profession cannot present a united front on the liquor problem, as it is hopelessly (and conscientiously) divided on that subject, but, when the national legislature begins to eliminate our valuable drugs, it is high time that the doctors of the entire country assert themselves; and they should assert themselves, for the principle of the thing, whether or not they agree with us in this specific instance. Accordingly, we have appealed to every other state society in the country to join with us, by protesting to their respective senators and congressmen; in addition, the Louisiana delegates to the American Medical Association will introduce a resolution along similar lines and we hope and believe that it will have the active support of every red-blooded American.

"Eternal vigilance is the price of Liberty." Time will tell whether we shall go forward or backward.

OUR PHYSICIANS' HOME FUND.

Almost every medical man, and particularly those of us who are specialists, are called upon at various time to render professional service to other doctors. True to the traditions of our profession we neither expect nor ask a fee for such service yet there are many who, in their gratitude, would willingly pay one if such were the custom. Many others would feel less as if they were imposing upon a fellow physcian's good nature if they were permitted to pay a fee.

Of course, the ethics of our profession preclude charging for professional courtesy but it has occurred to me that the desire to show appreciation and gratitude might be satisfied and a very worthy cause aided by the following procedure.

Let the consultant, surgeon or specialist say to his patient, "Doctor, if you were a layman my fee would be so much. As a medical brother I neither ask nor expect a fee but I want you to write a check for half that amount and make it payable to the Physicians' Home. I shall forward it to them with your compliments."

Such a plan would furnish a ready avenue for the expression of the gratitude that every patient feels toward his medical friend in need.

PREVENTION IN THE DOCTOR'S PILL BAG.

In the January issue of the Journal of the American Medical Association there is published a letter to the editor entitled "The Right to Prevention of Infectious Disease," from Dr. Abraham Zingher of New York, to whom the world owes so much for the means we now possess for active immunization against diphtheria.

Dr. Zingher in his letter cites a case of a 3 year old child to whom he was called in consultation with the family physician who had delivered the child and looked after it during its entire life history. The child was in the moribund stage of nasopharyngeal diphtheria, although it had received two days previously an insufficient dose of diphtheria antitoxin. Pointing out to the family physician that a fatal dose of diphtheria toxin may easily be absorbed from the nasopharyngeal fossa before the physician may become aware of the infection, he asked the doctor why he had allowed three years to elapse without placing upon the parents the responsibility of deciding whether or not the child should be immunized. The answer was the familiar refrain, that he was too busy treating sick people. In many instances, of course, as in the present, the treatment of the sick is of no avail, whereas a little attention to prevention means life to the patient.

As a result of this and many other similar every day experiences, Dr. Zingher states the following conclusions:

"1. The physician has a definite moral and professional responsibility to let his patients and their parents know the accepted facts in preventive medicine and hygiene, so that the patients shall decide and be personally responsible for preventable sickness and death in their own families.

2. The patients have a definite right to expect that their physicians shall let them know these facts on which they themselves will have the choice of decision.

3. It will pay general practitioners and pediatricians financially to carry out such immunizations against different preventable infectious diseases that can be eradicated by proper prophylactic injections. Concentrating this type of work within a designated period of one hour each week, the physician will not only greatly benefit his patients, but will receive a full measure of compensation for his professional efforts during that hour.

4. It is the duty of the department of health or of the health officer of a community to create by suitable publicity the proper demand for prophylactic measures against the various preventable infectious diseases, for which well recognized immunilogic procedures have been established through research and clinical experience. The health officer must aid the physician in his efforts, as the latter cannot be expected to urge too strongly professional services on his patients for which he receives financial remnueration.

This is the most effective way in which our preschool child population can be reached—through the general practitioner, whom the family has known for years, and in whom the individual members have confidence."

The medical practitioners must keep abreast with such phases of preventive medicine as they are able to apply among their patients, as herein lies their greatest reward in life saving. Wherein the problem reaches beyond their own limitations, they should lead community sentiment to demand the establishment of adequate full-time public health service to take care of the pressing needs of preventive medicine.

Certain preventive measures, such as immunization against smallpox, typhoid, and diphtheria, have become as firmly established for the prevention of these diseases as has quinine in the curative treatment of malaria. The practitioner must begin to interest his clientele in the universal adoption of these measures. They must become a part of his "tool kit," the same as quinine.

CORRESPONDENCE.

February 25, 1927.

To the Editor:

The Chairman of the U. S. Pharmacopoeia Revision Committee has asked the Sub-committee on Therapeutics and Pharmacodynamics to address to you a statement explaining the purpose of the presentation of the volume of the Tenth Revision of the United States Pharmacopoeia, which was forwarded to you a few days ago. This object is partly to make it convenient for you to familiarize yourself with the rather important changes, the additions, deletions, and modifications of titles, that have been made in this revision. The chief object, however, is to enlist your assistance, and to give you some help, in bringing the ideals of the Pharmacopoeia to the attention of your students; to acquaint them, through you, with the existence of this work and with the objects that it represents; to point out how these aims serve and deserve their professional interest; and to make them somewhat familiar with the book as a reference work of authoritative information. It is especially important that medical students should have convenient access to the copy of the Pharmacopoeia as a reference book, since it is not intended as a medical text-book.

As you know, the immediate purpose of the Pharmacopoeia consists in providing standards for the standard drugs, and in this it may be truthfully said to reflect the best practice of the American medical and pharmaceutical professions. By giving official recognition, sanction and en-

couragement to the best, it serves as a powerful incentive and means for improvement and progress of the two professions who own it in common, and who manage it by a democratic system that should and does make the Pharmacopoeia representative of, and responsive to, the whole membership of both professions. Indeed, one of the objects of this presentation is to keep up interest in this popular control, so that the students, who will be practitioners by the time of the next Pharmacopoeial Convention, will help to elect and send competent representatives.

The last Committee of Revision took the wise step of dividing the work and responsibility of the revision fairly definitely between the two professions, according to their special training. The selection of the "best" drugs and preparations, the assignment of their dosage, the elaboration of bio-assays, and other matters requiring medical knowledge were left essentially to the physicians of the Revision Committee; while the pharmacists, chemists and botanists were charged with the working formulas, tests, etc. This division increased the general efficiency and worked out very happily.

The selection of the "best" in drugs is necessarily a delicate undertaking; but the Committee tried faithfully to act in harmony with the tendencies of modern medicine; to eliminate what seemed at present useless or practically superfluous; and to add the new drugs whose value had been fairly definitely established. That was made possible by the authorization to admit drugs protected by patent, as is the case with so many of the synthetic chemicals. Accordingly, the present Pharmacoepoeia was able to include standards, and incidentally non-copyrighted names, for the arsphenamines; procaine (novocaine) and other synthetic anesthetics; chaulmoogra oil and ethyl chaulmoograte; amidopyrine (pyramidon); the colloidal silver preparations, mild and strong; barbital (veronal) and phenobarbital (luminal); calcium iodobehenate (sajodin); carbromal (adalin); chloramine (chlorazene) and dichloramine; epinephrine (adrenalin); thyroxin, and a number of others. To an increasing extent, teachers and students may find it profitable to look upon the titles of the Pharmacopoeia as a basic reference list of drugs and preparations of worth; but even those who may not agree with the Committee in all its decisions will find the list of additions and deletions at least quite interesting. Incidentally, strict adherence to the official names and abbreviations helps to avoid confusion in prescribing and in dispensing. A list of preparations is given under each drug, as also the ordinary dose, in both metric and apothecaries system.

The bulk of the text of the Pharmacopoeia consists of working directions for preparations and for testing, which are very important to pharmacists and indirectly also to physicians, since they insure uniformly high quality of the drugs; but the details of much of this text are not in the province of medical men. There are, however, quite a number of other valuable features, which make the Pharmacopoeia a very handy source of useful information. These are best appreciated by examining the Table of Contents, on pages III and IV of the book, or, better still, by running through its pages. We would mention especially the authoritative definitions and descriptions; the physical constants, such as solubilities, melting points, etc.; the admirable succinct "Identification Tests for Chemicals," pp. 440-444; the descriptions of standard analytical procedures and methods; the formulas for test solutions and volumetric solutions and equivalents; the tables of formulas and molecular weights of a large list of chemicals; of equivalents of temperatures, of weights, and of measures—all in convenient form and reliable. The descriptions of the bio-assays are of especial interest to pharmacologists. It is interesting to recall that the United States Pharmacopoeia has set the pace for the world in this subject.

Our Sub-committee ventures to suggest that you take occasion to point out to your students the value of our national Pharmacopoeia in these various directions; that you encourage them to become familiar with it, and to this end, that you place the volume in your library or laboratory, where the students may have access to it.

Very respectfully,

W. A. BASTEDO,
H. C. WOOD, JR.,
TORALD SOLLMANN, *Chairman*,
Of the Sub-Committee on Therapeutics and Pharmacodynamics.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

During the month of March the Board of Directors has held one regular meeting to consider the By-Laws, and the Society has held two scientific meetings.

The Society has empowered the President to appoint a Committee on Periodic Health Examinations, this Committee to formulate plans for a Periodic Health Week, which is proposed for some time this summer, most likely in the month of May. This Committee has been appointed as follows:

Dr. Paul J. Gelpi, chairman; Dr. J. Birney Guthrie, Dr. Urban Maes, Dr. J. W. Newman and Dr. P. B. Salatich.

The Society has also ordered that the President appoint a Committee of three to be known as the Publicity Committee, this Committee to consist of an Internist, a Surgeon and a member at large. This Committee is to receive and censor in the name of the Society all medical material intended for the public. As yet this Committee has not been appointed.

The Scientific Programs at the two meetings were as follows:

March 14th—"Medicine in the Talmud." By invitation, Rabbi Mendel Silbur, M. D., Ph. D.

"The Newer Conception of Achylia Gastrica," by Daniel N. Silverman; discussed by Dr. Allan Eustis.

March 28th—"The Diagnosis of Coronary Occlusions," by Dr. I. I. Lemann; discussed by Geo. R. Herrmann.

"Septicemia," by Dr. Isidore Cohn; discussed by Drs. J. D. Rives and I. M. Gage.

"Neisserian Urethritis and Prostatitis—a Treatment Therefor," by Dr. Chas. E. Verdier.

The following were elected to membership:

Active Members—Drs. Morris J. Duffy and Theodore A. Jung, Jr.

Interne Members—Drs. F. Y. Durrance, A. J. McComiskey and Sam B. Saiewitz.

The Society is now investigating the advisability of having motion picture films and phonographic records made of some of our prominent and distinguished members, a trial reel of Dr. Rudolph Matas having been made and a trial record of Dr. Ernest S. Lewis. No definite action has been taken yet in this matter as the samples records are yet to be demonstrated to the Society.

The Membership of the Society is now 486.

REPORT OF TREASURER

Actual Book Balance, 1-31-27	$2,828.84
Receipts during February	$2,217.34
	$5,046.18
Expenditures	$ 888.99
Actual Book Balance	4,157.19
Outstanding Checks	$ 105.00
Bank Balance 2-28-27	$4,262.19

REPORT OF LIBRARIAN

Eight bibliographies have been prepared during the month on subjects as follows:

Right-sided Abdominal Pain.

Carcinoma of Pancreas.

Drainage of the Gallbladder (1925-26).

Dermoid Cysts of Ovary (1922-27).

Conservative Gynecology.

Warthin's Work on Syphilis of Heart.

Histamin (1925-26).

Congenital Umbilical Hernia (1916-26).

These lists have been placed on file for the use of the membership. The reference work has been so heavy that the Assistant Librarian has been unable to list any further books to send to the Interne's Library at Charity Hospital. We hope to continue this work during March. Approaching meetings of medical societies are always heralded by increased library activities. The reference calls have been constant.

70 books have been added to the Library. Of these 47 were received by binding, 13 from the New Orleans Medical and Surgical Journal and 10 by gift. 10 volumes were donated during February by Dr. H. W. E. Walther.

The new shelving and catalog case have been shipped and are expected at an early date, thereby helping to relieve the congested condition of our shelves and card records. A box of journals has been prepared and sent away for binding.

Accompanying this report is a list of the new books added to the collection during the month.

NEW BOOKS—FEBRUARY.

Montague—Modern Treatment of Hemorrhoids. 1926.

Veeder—Preventive Pediatrics. 1926.

Campbell—Delusion and Belief. 1926.

Macleod—Physiology and Biochemistry. 1926.

Silverman—Oral Surgery. 1926.

Koby—Slit-lamp Microscopy of the Living Eye. 1926.

Meyer—Experimental Pharmacology. 1926.

Evans—Recent advances in Physiology. 1926.

Janet—Psychological Healing. 2 v. 1925.

Arvedson—Medical Gymnastics and Massage. 1926.

Blanton—Normal Physical Signs. 1926.

Fannett—Surgery of Gastro-duodenal Ulceration. 1926.

Lumb—The Urethroscope. 1919.

Blum—Renal Diagnosis. 1914.

Haire—Rejuvenation. 1925.

Lewis—Cystoscopy and Urethroscopy. 1915.

Baar—Die Indicanurie. 1912.

Newman—Movable Kidney. 1907.

Joergensen—Microorganism and Fermentation. 1911.

American Laryngological, Rhinological and Otological Association Transactions. 1926.

Delavan—Early days of the Presbyterian Hospital, New York City. 1926.

Commission on Medical Education—Preliminary Report. 1927.

H. THEODORE SIMON, M. D.,
Secretary.

WHY WE SHOULD ATTEND SCIENTIFIC MEDICAL MEETINGS.

The Medical Profession, like any other organized group of workers in the world, requires association and exchange of ideas to promote its growth and power for good. The paramount achievement of the Medical Profession has been its advance along scientific lines; the relative benefits accruing to the human race have been incalculable and are still being reaped, while new seeds are yet being sown. In order that every member of organized medicine may do his part to further the improvements and advances of his profession and himself, he must associate and exchange ideas and experiences with his fellow practitioners. The opportunity to discharge this privilege and duty is best afforded by the meetings of the Medical Societies.

Many parish societies have the advantages and opportunity of meeting at frequent intervals, some as often as twice a month, but the great bulk of the medical profession looks forward to the annual meeting of the State Medcal Society as the coming of a much anticipated event. At our annual State Society Meeting and as the meeting of the parent society (the American Medical Association), an opportunity for concentrated post-graduate education is afforded, such as has never been the privilege of few other professions. The University professor and general practitioners, surgeons and internists, and men in all branches of medical practice bestow the whole gem of medical experience, on discussions following papers affording great benefit to humanity.

The coming meeting of the Louisiana State Medical Society, with the largest membership in its history, meeting in the greatest medical center in the South at the heights of its medical career, offers an opportunity unexcelled in the past for those attending, to derive the greatest benefit of the concentrated post-graduate education. At this meeting, for the convenience of the attending members, the program will be arranged as is done in the American Medical Association. Surgical and medical scientific sections will be separated, meetings going on simultaneously during the meeting. This will enable the members to attend the section in which he is most interested in and save a loss of time. Clinics will be provided on a larger scale than heretofore. New Orleans, which has more than ample equipment of hospital facilities, offers more clinical material than any other Southern city, and along certain lines provides more than any other city in America. The Medical Profession of New Orleans wants its professional brothers to come in large numbers, and they are assured of a hearty welcome and careful attention during their stay in our city.

C. V. UNSWORTH, M. D.,
(Publicity Committee.)

LOUISIANA STATE MEDICAL SOCIETY NEWS

H. Theodore Simon, M. D., Associate Editor.

ANNOUNCEMENTS OF ENTERTAINMENT PROGRAM.

Monday, April 25th, 1927.

Surgical Clinics in the morning.

Luncheon at 12:30, tendered by the French Hospital.

(Note: Automobiles will be at the Hutchinson Memorial at 12 o'clock to convey the guests to the French Hospital.)

Medical Clinics in the Afternoon.

(Note: These clinics are held for members of the Louisiana State Medical Society who are not members of the House of Delegates.)

FIRST DAY.

Tuesday, April 26th, 1927

Call to Order.....
Dr. S. M. Blackshear
President, Louisiana State Medical Society

Invocation .....
Rev. Albert Beiver, S.J.
Rector Jesuit Church

Address of Welcome ....
City of New Orleans
Hon. Arthur J. O'Keefe, Mayor

Address of Welcome ....
Orleans Pa. Med. So.
Dr. A. E. Fossier, Pres.

Address .....
Dr. S. M. Blackshear
President Louisiana State Medical Society

Response .....
Dr. A. A. Herold,
Shreveport
President-elect, La. State Medical Society

Luncheon at 12:30, tendered by the Baptist Hospital.

DR. S. M. BLACKSHEAR
President Louisiana State Medical Society

(Note: Automobiles will be at the Hutchinson Memorial at 12 o'clock to convey the guests to the Baptist Hospital.)

Tuesday at 8 p. m.....President's Reception
Auditorium, Elk's Club

Program to be prepared by the Secretary of the Louisiana State Medical Society, to be followed by dancing. Music furnished by the Dixola Orchestra.

Wednesday, April 27th.

Luncheon tendered by Hotel Dieu at 12.30.

(Note: Automobiles will be at the Hutchinson Memorial at 12 o'clock to convey the guests to the Hotel Dieu.)

Wednesday at 7 p. m.....Annual Dinner
la Louisiane Restaurant

For members of the Louisiana State Medical Society.

Thursday, April 28th

Luncheon at 12:30, tendered by the School of Medicine, Tulane University.

Golf Tournament.

The Scientific Exhibits will be held in the Faculty Room as in the past.

Commercial Exhibits, 18 spaces have been sold out of 23, and we expect to dispose of the remainder in the next few days.

SPECIAL ANNOUNCEMENTS.

The Chairman of the Arrangement Committee wishes to call the attention of the Delegates to the following important announcements.

Automobiles will be furnished to convey guests to the various noon hour hospital luncheons and will be designated by an appropriate wind-shield mark.

The annual dinner is for members of the Louisiana State Medical Society and its invited guests.

Those desiring to attend the dinner will secure cards upon registration. No cards will be issued to New Orleans physicians after 5 p. m. April 26th. The books will be closed for the dinner to out-of-town visitors at noon April 27th. It will be absolutely necessary to secure cards for admission to the annual dinner.

Those members desiring to participate in the Golf Tournament will so register at the Registration Booth and will immediately be put in touch with Dr. Val H. Fuchs or a member of his Committee.

The annual dinner and the dance following the President's Reception will be informal affairs.

The attention of the members is called to the fact that there will be separate meetings for the medical and surgical sections.

LUCIEN A. LeDOUX, M. D.,
Chairman Arrangements Committee.

PARTIAL SCIENTIFIC PROGRAM OF LOUISIANA STATE MEDICAL SOCIETY MEETING

New Orleans, April 26th, 27th and 28th

SECTION ON MEDICINE AND THERAPEUTICS.

Dr. W. S. Kerlin, Chairman, Shreveport.

1. "Primary Intrathoracic Malignancy," by Dr. J. M. Perrett, New Orleans. To open discussion, Dr. Randolph Lyons, New Orleans; followed by Dr. Chaille Jamison, New Orleans.

2. "Syphilis of the Lungs, with Report of Case," by Dr. R. G. Douglas, Shreveport. To open discussion, Dr. T. P. Lloyd, Shreveport; followed by Dr. S. C. Barrow, Shreveport.

3. "Chronic Pancreatitis, with Report of Cases," by Dr. J. E. Knighton, Shreveport. To open discussion, Dr. Allan Eustis, New Orleans; followed by Dr. I. I. Lemann, New Orleans.

4. "The Protean Manifestations of Coronary Disease," by Dr. Frederick A. Willius, Rochester, Minn. To open discussion, Dr. A. E. Fossier, New Orleans; followed by Dr. G. R. Herrmann, New Orleans.

5. The Diagnosis of Hemolytic Jaundice," by Dr. John B. Elliott and Dr. F. M. Johns, New Orleans. To open discussion, Dr. A. A. Herold, Shreveport; followed by Dr. W. P. Butler, Shreveport, La.

6. "The Treatment of Aestivo Autumnal Malaria," by Dr. J. B. Vaughan, Monroe. To open discussion, Dr. C. C. Bass, New Orleans; followed by Dr. S. L. White, Ruston.

7. "Certain Phases of Gall-Bladder Function —Their Clinical Value," by Dr. D. N. Silverman and Dr. Leon J. Menville, New Orleans. To open discussion, Dr. S. K. Simon, New Orleans; followed by Dr. L. D. Gremillion, Alexandria.

SECTION ON PEDIATRICS.

Dr. E. R. Yancey, Chairman, Monroe.

1. "Toxic Diarrheas of Parenteral Origin," by Dr. J. A. Crawford, Lake Charles. To open discussion, Dr. L. I. Tyler, Baton Rouge.

2. "Three Interesting Cases Coincidental or Otherwise, Following Scarlet Fever Prophylaxes Injections," by Dr. M. S. Picard, Shreveport. To open discussion, Dr. Chas. Bloom, New Orleans.

3. "Certain Aspects of Pneumonia in Early Life," by Dr. L. R. DeBuys, New Orleans. To open discussion, Dr. Ludo Von Meysenbug, New Orleans.

SECTION ON NERVOUS DISEASES.

Dr. T. J. Perkins, Chairman, Jackson.

1. "Some Observations which May Help to a Better Understanding in the Problems of Our Mentally Ill," by Dr. Robert H. Bryant, Pineville. To open discussion, Dr. Joseph A. O'Hara, New Orleans; followed by Dr. W. P. Butler, Shreveport.

2. "Epidemic Encephalitis, a factor in Some Morbid Mental States," by Dr. Henry Daspit, New Orleans. To open discussion, Dr. Edmund McD. Connelly, New Orleans; followed by Dr. C. S. Holbrook, New Orleans.

3. "The Influence of Hospitalization on the Mentally Ill," by Dr. M. S. Freiman, Jackson. To open discussion, Dr. John N. Thomas, Alexandria; followed by Dr. C. S. Miller, Jackson.

SECTION ON BACTERIOLOGY AND PATHOLOGY.

Dr. J. A. Lanford, Chairman, New Orleans.

1. "The Etiology of Measles," by Dr. C. W. Duval, New Orleans. To open discussion, Dr. W. H. Harris, New Orleans; followed by Dr. J. H. Musser, New Orleans.

2. "Proper Interpretation of Total White and Differential Blood Findings, by Dr. F. G. Ellis and Dr. W. P. Butler, Shreveport. To open discussion, Dr. C. E. Hamner, Shreveport.

3. Dr. George Hauser, New Orleans. Title not yet announced.

SECTION ON PUBLIC HEALTH AND SANITATION.

Dr. J. W. Faulk, Chairman, Crowley.

1. "Mental Hygiene in Relation to General Health," by Dr. G. M. G. Stafford, Alexandria. To open discussion, Dr. Chas. Holbrook, New Orleans; followed by Dr. T. J. Perkins, Jackson.

2. "The Proper Relation between the Health Officer and the Physician," by Dr. Felix J. Underwood, State Health Officer, Jackson, Miss. To open discussion, Dr. Oscar Dowling, New Orleans; followed by Dr. L. R. DeBuys and Dr. R. W. Mendelson, New Orleans.

3. "The Milk Problem from the Municipal Health Officer's Viewpoint," by Dr. J. G. Martin,

Lake Charles. To open discussion, Mr. Leslie C. Frank, U. S. P. H. S.; followed by Dr. W. H. Robin, New Orleans.

4. "Milk, Its Relation to Infectious Diseases," by Dr. P. R. Neal, Monroe. Discussion to be opened by Dr. K. E. Miller, Director, Parish Health Administration; Dr. John Schreiber, Franklinton, and Dr. W. W. Butterworth, New Orleans.

SECTION ON GENERAL SURGERY.

Dr. Emmett L. Irwin, Chairman, New Orleans.

1. "Differential Diagnosis between Acute Articular Rheumatism and Acute Osteomyelitis," by Dr. Guy A. Caldwell, Shreveport. Lantern Slides. To open discussion, Dr. Carroll W. Allen, New Orleans; followed by Dr. W. F. Henderson and Dr. H. Theodore Simon, New Orleans.

2. "Bilateral Empyema of Pleural Cavities," by Dr. J. Q. Graves, Monroe. Report of Three Cases. To open discussion, Dr. Erasmus D. Fenneer, New Orleans; followed by Dr. S. C. Lyons, New Orleans.

3. "Management of Cases of Obstructive Jaundice," by Dr. Waltman Walters, Mayo Clinic, Rochester, Minn. To open discussion, Dr. J. H. Musser, New Orleans; followed by Dr. D. N. Silverman and Dr. Jerome Landry, New Orleans.

4. "Difficult Femurs," by Dr. Muir Bradburn, New Orleans. To open discussion, Dr. Paul McIlhenny, New Orleans.

5. "Observations on Dermitomycosis in New Orleans," by Dr. Aldo Castellani, New Orleans. To open discussion, Dr. H. E. Menage, New Orleans; followed by Dr. Ralph Hopkins, New Orleans.

6. "Hernia of Ovary and Fallopian Tube," by Dr. Isidore Cohn, New Orleans. To open discussion, Dr. John Dicks, New Orleans; followed by Dr. P. Graffagnino, New Orleans.

7. "The Acute Abdomen," by Arthur E. Hertzler, University of Kansas, Kansas City, Mo.

8. "Ununited Fractures," by Dr. Willis C. Campbell, Memphis, Tenn. To open discussion, Dr. Isidore Cohn, New Orleans; followed by Dr. John T. O'Ferrall, Dr. H. Theodore Simon, New Orleans, and Dr. Guy A. Caldwell, Shreveport.

9. "Breast Tumors—What Shall We Do with Them," by Dr. A. C. King, New Orleans. To open discussion, Dr. J. A. Danna; followed by Dr. I. M. Gage and Dr. Chas. W. Duval, New Orleans.

SECTION ON GYNECOLOGY AND OBSTETRICS.

Dr. Hilliard E. Miller, Chairman, New Orleans.

1. "The Common Causes of Uterine Bleeding," by Dr. C. Jeff Miller, New Orleans. To open discussion, Dr. Curtis H. Tyrone, New Orleans; followed by Dr. H. W. Kostmayer, New Orleans.

2. "Comparative Results of the Cautery versus Sturmdorf Operation in Certain Lesions of the Cervix," by Dr. David I. Hirsch, Monroe. To open discussion, Dr. C. A. Wallbillich, New Orleans; followed by Dr. P. Graffagnino, New Orleans.

3. "Treatment of Pre-Eclamptic Toxemia," by Dr. H. Vernon Sims, New Orleans. To open discussion, Dr. Maurice J. Gelpi, New Orleans; followed by Dr. Arthur Caire, Jr., New Orleans.

4. "Conservation Gynecology," by Dr. W. D. Phillips, New Orleans. To open discussion, Dr. E. L. King, New Orleans; followed by Dr. John Dicks, New Orleans.

SECTION ON EYE, EAR, NOSE AND THROAT

Dr. J. P. Leake, Chairman, New Orleans.

1. "Foreign Bodies in the Air and Food Passages," by Dr. H. L. Kearney, New Orleans. To open discussion, Dr. R. C. Lynch, New Orleans; followed by Dr. A. I. Weil, New Orleans.

2. "Some Observations Made on a Recent Visit to Several European Eye Clinics," by Dr. H. N. Blum, New Orleans. To open discussion, Dr. Victor Smith, New Orleans.

3. "Indications for Surgical Procedure in Sphenoiditis from Ophthalmological Studies," by Dr. M. Earle Brown, New Orleans. To open discussion, Dr. Carl Granberry, New Orleans; followed by Dr. C. W. Blackshear, Opelika, Ala.

4. "My Observation of the Surgical Correction of Squint," by Dr. Arthur Whitmire, New Orleans. To open discussion, Dr. I. Littell, Alexandria; followed by Dr. Rufus Jackson, Baton Rouge.

SECTION ON UROLOGY.

Dr. E. K. Hirsch, Chairman, Baton Rouge.

1. "Preoperative and Postoperative Care of Prostatics," by Dr. P. Jorda Kahle, New Orleans. To open discussion, Dr. B. M. McKoin, Monroe.

2. "Caudal Anaesthesia in Urology," by Dr. Frank J. Chalaron, New Orleans. To open discussion, Dr. H. W. E. Walther, New Orleans.

SECTION ON RADIOLOGY.

Dr. Lucien A. Fortier, Chairman, New Orleans.

1. "Ultra Violet Radiations," by Dr. E. C. Samuel and Dr. E. R. Bowie, New Orleans.

2. "Relief of Pains in the Head by the Use of Physical Means," by Dr. W. A. Lurie, New Orleans.

3. "Radiation Therapy of Benign Pelvic Pathology,"by Dr. S. C. Barrow, Shreveport.

We would desire to call your attention that our President, Dr. S. M. Blackshear, has asked that all meetings of the House of Delegates and also the meetings of the Scientific Session of the Convention be opened on time, in order that we may be able to finish our Program. Your co-operation in this regard is earnestly requested, so that the Sessions of the House and the General Meetings may not be delayed. Also you will observe from our pragram it is very complete in all departments, and it would be only by strict punctuality and adherence that same can be satisfactorily competed.

CLINIC DEMONSTRATIONS.

New Orleans has always been known as one of the great centers of Clinical Medicine of this country. With its varied hospital facilities a great amount of clinical material is attracted here on account of the numerous well equipped hospitals and we feel that there will be ample demonstrations to inspire interest for all who care to take advantage of this feature of the coming meeting of the Louisiana State Medical Society.

The chairman in charge of arranging this instructive program has already submitted a tentative schedule which will impress upon you a number of the best demonstrations that we are able to put forth.

Clinics have been arranged at all of the hospitals, that is, the Charity Hospital, Touro Infirmary, Hotel Dieu, Baptist Hospital, Presbyterian Hospital, French Hospital, Eye, Ear, Nose and Throat Hospital and Mercy Hospital, as well as some of scientific nature at the Hutchinson Memorial.

It is a noteworthy fact that demonstration clinics have been planned without any special attempt at "Orgies of Blood" in the operative way, as was formerly the fashion. We have felt that diagnostic and scientific clinics, without any great attempt at showing operations, would be more profitable,—consequently this idea has been put into effect.

We note on the program that a number of men are having scientific demonstrations in physiology, cardiology, tropical medicine, dermatology and allied subjects. This accentuates the fact that New Orleans is rapidly making a name for itself as a great center of scientific medicine as well as a center of clinical teaching.

The committee feels sure that these pre- and post-convention clinics will be a source of pleasure and profit to the visiting members of the Louisiana State Medical Society, and the Orleans Parish Medical Society, as the host, feels itself specially obligated to make this clinic feature most attractive.

The complete program, especially in regard to clinic material, has not been finally arranged; however, there is given below a tentative draft of some of the demonstrations which have been submitted up to this time.

Under the chairmanship of Dr. Isidore Cohn daily schedules will be posted in convenient places so that the membership will have the opportunity of choosing the subjects of most interest to each one individually.

PRE-CONVENTION CLINIC PROGRAM.

Hutchinson Memorial Building, Monday,

April 25th.

Dr. George R. Herrmann, 9:30-10:15.

Lantern Slide Lecture, "Electrocardiography."

10:15-11:15

The Department of Physiology will give the following talks:

1. Helio- and Phototherapy. The Radiation of the Sun compared with that of the Mercury vapor quartz lamp and the Carbon Arc. 15 minutes. Lantern. Henry Laurens.

2. Some Physiological Effects of Radiation. 15 minutes. Lantern and Charts. H. S. Mayerson.

3. Charts illustrating Cardiac Physiology and Electrocardiographic principles with applications. 15 minutes. Richard Ashman.

4. Charts illustrating the effects of climate on Basal Metabolism. 15 minutes. Roberta Hafkesbring.

11:15—12:15.

In the Department of Tropical Medicine, Drs. Castellani and Mendelson will give demonstrations and clinical talks on interesting Tropical Diseases.

Adjournment for luncheon at the French Hospital at 12:30.

2 P. M.

Under the auspices of the New Orleans Gynecological and Obstetrical Society, Round Table Conference will be participated in by members of this Organization. The exact program will be announced later.

2:45. Gynecological Symposium.

Dr. Thomas B. Sellers and

Dr. L. W. Magruder, The Use of Radium in the Treament of Uterine Fibroids.

Dr. H. W. Kostmayer, The Use of the Pessary.

Dr. John T. Sanders, The Rubin Test.

Dr. J. R. Flowers, Endocervicitis.

Dr. W. D. Phillips, Uterine Hemorrhage.

To be held in connection with the New Orleans Gynecological and Obstetrical Society.

Charity Hospital. Program in Charge of Dr. Jerome E. Landry.

8—12.

Surgery.

Dr. Matas	Dr. Graffagnino
Dr. Martin	Dr. Leckert
Dr. Cole	Dr. Fenner
Dr. Dorrestein	Dr. S. G. Wilson
Dr. Kostmayer	Dr. Paul McIlhenny
Dr. Maes	Dr. Richard

The above men are operating on their regular schedule days. The list of operations will be announced later.

Adjournment for luncheon at the French Hospital at 12:30.

2 P. M.

1. Dr. Castellani. Dermophytosis.
2. Dr. Musser. Blood Dyscrasia.
3. Dr. Turner. A new instrument demonstrating the velocity of pulse wave in various conditions, *i. e.*, Hypertension arterio-sclerosis, etc.
4. Dr. Fossier. Hypotension.
5. Dr. Granger. Demonstration in Radiology.
6. Dr. Couret. Demonstration in Pathology.
7. Dr. McIlhenny. Physiotherapy.
8. Dr. Simon. Physiotherapy.
9. Dr. Signorelli. Clinics Pediatrics.

Charity Hospital.

The Louisiana Dermatological Society will conduct a Round Table Conference, the following program will be had.

Skin Clinic.

9—11 A. M.

1. Vegetable Parasitic Diseases. Dr. H. E. Menage.
2. Syphilides. Dr. Ralph Hopkins.
3. Plant Allergy. Dr. J. N. Roussel.
4. Malignancies. Dr. M. T. Van Studiford.
5. Tropical Dermatomycosis in New Orleans. Dr. Aldo Castellani.
6. Animal Parasitic Diseases. Dr. R. A. Oriol.
7. Erythemia Multiforme. Dr. J. A. Devron.
8. Treatment in General. Dr. T. A. Maxwell.

The above program is in charge of Dr. T. A. Maxwell.

Adjournment for luncheon at the French Hospital at 12:30.

Touro Infirmary.

9—12.

In the various operating rooms operative surgical clinics will be held by the Staff. The operating surgeons and the operations will be announced later.

Adjournment for luncheon at the French Hospital at 12:30.

2 P. M.

1. Mistakes in Diagnosis of Heart Disease. J. M. Bamber, M. D.
2. Renal Thresholds in Diabetes Mellitus. R. T. Liles, M. D.
3. Pituitary Obesity. Harold A. Bloom, M. D.
4. Neoplasms of the Lung. I. I. Lemann, M. D.
5. Irritable Colon and Its Treatment. S. K. Simon, M. D., and D. C. Browne, M. D.
6. Present Status of Gall Bladder Disease. A. L. Levin, M. D.
7. Functional Diarrhea. D. N. Silverman, M. D.
8. Chronic Arthritis. J. C. Cole, M. D.
9. Hepatic Cirrhosis in Childhood. C. L. Eshleman, M. D.
10. Interesting Cases of Cerebro-Spinal Syphilis. C. S. Holbrook, M. D.
11. The Effect of Exanthin Bases as Diuretics in Myocardial Conditions. R. Lyons, M. D.
12. Ambulatory Treatment of Diabetes Mellitus. J. B. Guthrie, M. D.

Touro Infirmary.

Pediatric Clinic under direction of Dr. L. R. DeBuys.

Drs. Von Meysenbug, Kinberger, Loeber and Williams, subjects to be announced later.

Demonstrations by Dr. Lanford and Staff in Pathological Department.

Hotel Dieu.

Program in charge of Dr. Maurice J. Gelpi.

Eye, Ear, Nose and Throat Staff from 8 a. m. to 10 a. m.

Drs. Homer Dupuy, Jules Dupuy. T. J. Dimitry, R. H. Fisher, Val Fuchs, J. J. Ryan, A. A. Keller, G. J. Taquino and J. B. Larose.

A.—Usual surgical program, details of which will be announced later.

B.—Fifteen minutes practical talks:

8:00—Dr. Marion Souchon. Appendicitis.

8:15—Dr. J. T. Nix. Laminectomy.

8:30—Dr. D. J. Murphy. Cancer of Rectum.

8:45—Dr. John Signorelli. Infant Feeding.

9:00—Dr. P. A. Kibbe, Ethylene Gas Anaesthesia—McKesson Apparatus.

9:15—Dr. Lucien LeDoux. Cesarean Section.

9:30—Drs. Fortier and Gately. X-ray Demonstrations—Gall Bladder Visualization—Lipiodol Instillation.

9:45—Dr. H. E. Nelson. Atrophic Cirrhosis of Liver.

10:00—Dr. P. B. Salatich. Conservative Gynecology.

10:15—Dr. Louis Levy. Recent Advances of Thyroid Surgery.

10:30—Dr. M. Couret. Practical Blood Typing and other Laboratory Methods.

10:45—Dr. Maurice J. Gelpi. Splanchnic Anaesthesia in Upper Abdominal Surgery.

11:00—Dr. C. V. Unsworth. Traumatic and Post-Operative Phycoses.

11:15—Dr. A. E. Fossier. Electrocardiography.

11:30—Dr. A. Maher. Practical Value of Blood Chemistry.

11:45—Dr. J. A. Danna. Artificial Pneumothorax.

12:00—Dr. Paul J. Gelpi. Significance of Hematuria.

Adjournment for luncheon at French Hospital at 12:30.

Mercy Hospital.

Program in charge of Dr. John F. Dicks.

9—12.

9 A. M. Surgery—Drs. Ficklen and Leckert.

10:30 A. M. Gynecology—Drs. Dicks and Mayer.

11:30 A. M. Medical—Drs. Jamison and Campagna.

Clinic—Orthopedic, Drs. Fenner and Battalora.
Urology, Drs. Chalaron and Maihles.

Adjournment for luncheon at French Hospital at 12:30.

Presbyterian Hospital.

In Charge of Dr. J. M. Batchelor.

Program to be announced later.

Eye, Ear, Nose and Throat Hospital.

Program in charge of Dr. F. E. LeJeune.

Surgical Clinic to be by Dr. R. C. Lynch and Staff and Dr. Crebbin.

Illinois Central R. R. Hospital.

Clinic on Traumatic Surgery will be given by Dr. C. P. Brown.

Southern Baptist Hospital.

Program in charge of Dr. Shirley C. Lyons.

8—10 O'clock. Surgical Floor.

General Operative Clinic by Members of Surgical Staff.

The list of operations will be announced.

8:30—Dr. Samuel Hobson. General Management of Nephritis.

8:45—Dr. H. W. E. Walther. Diathermy in Urological Conditions.

9:00—Dr. P. J. Kahle. Urological Clinic.

9:15—Dr. C. L. Peacock. Hydronephrosis.

9:30—Dr. Allan Eustis. The Diagnosis and Treatment of Failing Liver Function.

9:45—Dr. W. A. Love. Lymphatic Leukemia.

10:00—Dr. John Smyth. Tumors of Face, with lantern slide illustrations.

10:00—Dr. Upton Giles and Dr. H. B. Alsobrook. Diabetic Symposium from Medical and Surgical Standpoint. (In Clinic Room, first floor.)

10:15—Dr. C. G. Cole. Surgery of the Gall Bladder.

10:30—Dr. Earl A. Hogan. Life Insurance Examinations.

10:45—Dr. Carroll W. Allen and Dr. Wilkes A. Knolle. Physical Therapy Aides in Post Operative Care. (Diathermy Department, sixth floor.)

11:00—Dr. O. W. Bethea. Diagnosis and Care of the Failing Heart.

11:15—Dr. Edwin A. Lawson. Pathological Conference. (Laboratory, eighth floor.)

11:30 — Dr. Waldemar Metz. Blood Transfusion.

11:45—Dr. Edmund McC. Connely. Trifacial Neuritis.

12:00—Dr. Robert Potts. Unusual Heart Conditions.

Adjournment for luncheon at French Hospital at 12:30.

2:00 — Dr. Guy A. Caldwell, Shreveport, and

2:30—Dr. J. T. O'Ferrall. Orthoplasty of Knee. Demonstration of case.

2:30 — Dr. Emmett L. Irwin. Clinic on Osteomyelitis.

2:45 — Dr. John H. Musser. Treatment of Measles.

3:00 — Dr. J. Holmes Smith. Amoebiasis.

3:15—Dr. Rena Crawford and Dr. G. Richarda Williamson, Pediatric Clinic.

GOLF CUP

3:30—Dr. C. S. Holbrook. Diagnosis and Treatment of Neuro-Syphilis.

3:45—Dr. Shirley C. Lyons. Thoracic Clinic. Artificial Pneumothorax in the Treatment of Pulmonary Tuberculosis Tuberculosis. Tuberculous Empyema.

Upon your arrival in New Orleans you will be able to obtain the operative schedule by telephoning the respective hospitals the night before.

Arrangements for this program have been in charge of Dr. Isidore Cohn, Chairman.

STATE MEDICAL SOCIETY GOLF TOURNAMENT.

The golf tournament will be held at the Colonial Country Club and may be played on any of the days of the meeting. Notice must be given to the club professional, or to a member of the Golf Committee, before starting out, that the round played is to count in the tournament play. Entrants must bring their club handicaps.

There will be four different contests, all of which may be competed for in one round of play, if the contestant so desires. There will be the Low Gross Score, Low Net Score, Kickers and Blind Hole tournaments.

Hausmann, Inc., have offered a very pretty cup for the low gross score. This cup will only become the permanent possession of anyone after winning it three times, not necessarily in successive years.

I. L. Lyons will also donate cup as prize for the Golf Tournament.

All further data can be obtained from

VAL H. FUCHS, M. D.,
Chairman of Golf Tournament.

SCIENTIFIC EXHIBITS.

There will be some very interesting Scientific Exhibits in the Faculty Room, Hutchinson Memorial Building, some of which are listed below.

X-ray Pictures. Dr. A. Henriques.

Exhibit of Department of Hay Fever and Asthma, Charity Hospital. Service of Dr. Wm. Scheppegrell and Dr. N. F. Thiberge. "Radiographs of Conditions of the Chest Simulating Asthma."

Exhibit of Department of Tropical Medicine. Dr. Aldo Castellani.

Exhibition of photographs of Squint Work. Dr. A. L. Whitmire.

Exhibits, 1. Special Instrument. 2. Interesting Specimens. 3. Lantern Slides. 4. Interesting Radiographs showing Primary Intra-thoracic Malignancy. J. T. Nix Clinic.

A Method for determining the quantitative reaction of stools. Dr. Daniel N. Silverman.

Demonstrations of the Color Acuity Test, with copies of peripheral fields together with case histories, a standard perimeter. Dr. M. Earle Brown.

Photomicrographs of urine sediments. Dr. F. M. Johns.

Interesting pyelograms, urological speciments and original urological instruments. Dr. H. W. E. Walther.

Methods of Diagnosis in Diseases of the Cardio Vascular System. Dr. B. R. Heninger.

ENTERTAINMENT.

While the prime object of medical meetings is to recharge our mental batteries, there is the social and humanistic side which finds its outlet in the entertainment features. These will offer opportunities for the sweet amenities of life, for recementing old friendships and the forging of new ties. With the "greater Hotel Dieu," the new Baptist Hospital, the reopened French Hospital, and Tulane Medical College, as our hosts for luncheon, there is a guarantee of tempting menues for the gastronomic side. At the famed "Louisiana" will be served a feast fit for Lucullus. Fancy such culinary products as: crayfish cocktail a la Paul Gelpi; bouille bass(e) a la C. C. Bass; stinga-ray a la Menville; French pastry a la LeDoux; and synthetic concoctions a la Seemann. There will be scintillations of wit and humor when our own Larry "turn the crank" becomes postprandial. This one night we will be unfettered, wifeless, when we go "stagging." Dr. R. Mainegra, our Chairman, will offer special importations from Broadway. On such a night, we will have to remember, that women are as old as they look, and men are only when they stop looking. So wide is the range of entertainment, that those who wish to chase the diminutive ball across verdant fields can meet contestants in the Golf Tournament. But the gala event will be the President's Reception, which will bring together the Doctors and "our Guests." God's fairest creatures will grace this occasion. And the night shall be filled with music, there will be a loosening of some stiff hinges as we "trip the light fantastic toe." On with the Dance! We must not miss it. Esculapians! like the Arabs of old, fold your tents, silently steal away from the cares that infest the day, and come to the State Medical Meeting at which all the glamor, beauty, and wholehearted hospitality of our City will be yours.

HOMER DUPUY.
(Publicity Committee)

The Bi-Parish Medical Society met in Clinton, La., February 2nd. An instructive and interesting paper was read by Dr. M. R. Freeman of the East Louisiana State Hospital on "Acute Gastro-Enteritis," discussed by members present. Dr. C. S. Miller of the East Louisiana State Hospital read instructive articles from The Journal of the American Medical Association.

At our next meeting, which will be held with the Superintendent and Staff of the East Louisiana State Hospital, the second Wednesday of April, Dr. J. W. Lee of Jackson will read from the Journal of the La. State Society, and Dr. C. P. May of the East Louisiana State Hospital will read a paper on Endocrines.

At our February meeting dinner was served in the Rest Hotel, which was thoroughly enjoyed.

The Eighth Congressional Medical Society met in Natchitoches, La., Tuesday, March 8, 7 p. m. sharp.

The following program was given:

Address by President Louisiana State Medical Association—Dr. S. M. Blackshear, New Orleans.

Prominent Landmarks in Modern Medicine, by the President-Elect—Dr. A. A. Herold, Shreveport, La.

The Treatment of Burns—By Dr. R. S. Roy, Lake End, La.

Immediately following the program, the Natchitoches Parish Medical Society entertained with a banquet, which everyone enjoyed.

A business and scientific meeting of the Third Congressional District Medical Society was held on March 8th. The doctors were wonderfully entertained by their confreres of Morgan City. The meeting was held aboard the fine steamboat "Norman" which is owned by the Mayor, M. E. Norman of Morgan City.

Dr. H. G. F. Edwards of Lafayette presided with Dr. Voorhies as secretary. Representative Hebert of St. Mary Parish delivered the welcome address. Dr. Homer Dupuy and Dr. Lucien LeDoux spoke on subjects interesting to the general practitioner.

The following officers were elected for the year 1927:

President—Dr. C. C. DeGravelles, Morgan City.

Vice-President—Dr. J. L. Beyt, St. Martinville.

Secretary-Treasurer—Dr. R. D. Voorhies, Lafayette.

Delegate—Dr. C. M. Horton, Franklin.

Alternate—Dr. T. I. St. Martin, Houma.

The supper was a feast thoroughly enjoyed. There were invitations from two sources for the next meeting but it was decided to convene the next session at Lake Catahoula. The hosts will be the physicians of St. Martin Parish. The following session will take place in Houma, by invitation of the Lafourche Valley Medical Society.

At the December meeting the following officers were elected for 1927:

President—Dr. R. F. DeRouen, Clarence, La.

Vice-President—Dr. Joseph Bath, Natchitoches, La.

Secretary-Treasurer—Dr. W. W. Knipmeyer, Natchitoches, La.

At the January meeting, held on Jan. 25, Dr. J. A. Hendrick, of Shreveport, La., gave the principal address. His subject was "The Treatment of Fibroid Tumors of the Uterus."

At the February meeting held on Feb. 22, Dr. A. A. Herold, President-elect of the State Society, gave the principal address. His subject was, "Some Facts in Medicine with special emphasis on Diagnosis."

The Society has a membership of 20 at the present time. This is the same membership as was maintained all during the year of 1926 and is the largest in the history of the Society.

The meeting of the Eighth District Medical Society which was held on March 8 in Natchitoches was postponed on account of the inclement weather.

During 1926 the following papers were read before this Society:

January, President's Address, Dr. R. F. DeRouen, Clarence, La.

February, "Need of Exact Diet in Diabetes," Dr. B. E. Nelken, Natchitoches, La.

March, "The Alkali Balance in Surgical Cases," Dr. E. L. Sanderson, Shreveport, La.

April, Meeting of State Society.

May, "Surgical Diagnosis of Gall-bladder Disease", Dr. J. I. Peters, Alexandria, La.

June, "Safe and Effective Surgery for the Hypertrophied Prostate" Dr. M. H. Foster, Alexandria, La.

July, "Indiscriminate Use of Opiates and Total Abstinence of Food and Cathartics in Acute Abdominal Conditions," Dr. Penn Crain, Shreveport, La.

August, "Pediatrics in Daily Practice," Dr. M. S. Picard, Shreveport, La.

September, "Sterilization of Mental Derelicts," Dr. J. N. Thomas, Pineville, La.

October "Diseases of the Pancreas", Dr. J. E. Knighton, Shreveport, La.

November, "Some Aspects of Modern Preventive Medicine."

December, Annual Banquet. The members and ladies were guests of President and Mrs. DeRouen at their home in Clarence.

The LaSalle Parish Medical Society (Physicians Improvement and Protective Association) met at Urania, March 3rd, at 2 p. m.

Vice-President Dr. J. P. Durham presided. The President, Dr. T. M. Butler, absent because of personal illness.

Visiting Physicians: Dr. R. O. Simmons, Dr. D. C. McBride, Dr. M. H. Foster, and Dr. Marvin Cappel, Alexandria; Dr. S. C. Barrow and Dr. C. R. Gowan, Shreveport; Dr. I. N. Adams, Selma, and Dr. C. W. Patterson, Tullos. Local membership well represented.

Dr. W. V. Taylor outlined briefly the history of the Society the purpose of the organization and the work accomplished in the field of organized medicine, calling attention to the outstanding character and high personnel of its membership. He paid a tribute to high standing and reputation in the State of Honorary Membership, particularly eulogizing Dr. I. J. Newton of Monroe and Dr. R. O. Simmons of Alexandria for valuable services rendered organized medicine in Louisiana, and in behalf of humanity. Men whose reputations were not locally invironed but interstate.

Dr. C. W. Patterson of Tullos was unanimously elected to membership. Upon motion of Dr. R. O. Simmons, seconded by Dr. Taylor, Dr. H. W. Kostmayer was elected honorary member, after many very eulogistic remarks by members.

The Scientific Program consisted in a paper read by Dr. S. C. Barrow of Shreveport, "Radiation in Non-Malignant Gynecology." Dr. Barrow was particular in pointing out that there was no conflict between the use of radium and rational surgery, both having distinct fields of action. Dr. Barrow not only impressed one with his personality, but with his knowledge of his subject. He threw a flood of light upon the therapeutics and technique of radiology. The paper was well received, was instructive and entertaining. At its conclusion there was spontaneous and liberal applause, and Dr. Barrow was warmly congratulated.

Dr. D. C. McBride, of Alexandria, opened the discussion from the standpoint of a radiologist. Dr. R. O. Simmons and Dr. M. H. Foster discussed it from the viewpoint of the surgeon.

Dr. C. R. Gowan exhibited X-ray pictures of Pulmonary Tuberculosis, showing step by step the reparatory process toward recovery and what

can be done by almost absolute rest and feeding. These radiograms were very instructive, and much appreciated. After adjournment, Dr. O. F. Matthews invited the Society and guests to the Domestic Science Building, Urania High School, where an elegant lunch was served by the Domestic Science teacher and her students.

At the regular meeting of the Rapides Parish Medical Society, held Monday evening, March 7th, at the Baptist Hospital Alexandria, a scientific program was rendered as follows:

"Melanotic Sarcoma, With Report of Case and Presentation of Autopsic Specimens," by Dr. J. E. Knighton, Shreveport. "Acidosis," by Dr. C. M. Jarrell, Alexandria.

The Baptist Hospital of Alexandria has launched its campaign to raise $100,000. Among the improvements contemplated are the erection of a new Nurses' Home to cost $50,000 and the increase in the number of hospital beds from 60 to 100.

DR. STIRLING HONORED.

Dr. Louis Grey Stirling, eldest in years of service of Baton Rouge physicians, on March 9, at a dinner given in his honor by the East Baton Rouge Parish Medical Society, was made permanent chief of staff of Our Lady of the Lake Sanitarium, and was presented a loving cup as dean of medicine in this community.

About 35 members of the society gathered at the Istrouma hotel where the tribute was paid him.

Louis Grey Stirling was born in West Feliciana Parish, Louisiana, February 8, 1862, and received his early education in private schools of his native parish. He was graduated from school of medicine, at Tulane University of Louisiana, with class of 1894, and during his last year served as interne in Touro Infirmary. He began practice of medicine in Baton Rouge in April, 1894, and has spent his entire life there. On December 9, 1896, he was married to Miss Alma Mansur. He is affiliated with the East Baton Rouge Medical Society, of which he has served as president, the Sixth Congressional District Medical Society; the Louisiana State Medical Society, of which he has served as vice-president, and American Medical Association. He has been head physician of the State Prison since 1900. He served as member of City Council from 1902 to 1906. He is a member of the Episcopal Church, and also member of Masonic Fraternity, being a Chapter Degree Mason and Past Master of St. James Lodge. He is permanent Chief of Staff of Our Lady of the Lake Sanitarium.

Dr. J. A. Caruthers was toastmaster.

The program was as follows:

Address by His Honor Wade H. Bynum, Mayor.

Presentation of Silver Loving Cup by Dr. Philip H. Jones.

Conferring the office of Permanent Chief of Staff by Our Lady of the Lake Sanitarium, Dr. Lester J. Williams.

Flowers presented by Baton Rouge General Hospital, Our Lady of the Lake Sanitarium and the Graduate Nurses' Association of Baton Rouge.

Those present included the following doctors: J. A. Tucker, G. W. Sitman, H. Guy Riche, R. C. Kemp, Bob Jones, C. F. Duchein, L. F. Lorio, W. H. Pipes, J. J. Robert, W. R. Eidson, T. C. Foreman, E. B. Young, Rhett G. McMahon, C. A. Lorio, Cecil Lorio, W. B. Chamberlain, H. W. Lee, J. R. Chisholm, J. H. McCaa, Henry McKowen, Tom Spec Jones, Rufus Jackson, Louis K. Tyler, P. H. Jones, J. A. Caruthers, L. J. Williams, H. C. Morris, T. C. Paulsen and E. O. Trahan, C. A. Weiss, John McKowen.

The Shreveport Charity Hospital has, recently, let out contract for another new building to care for the rapidly-increasing demand for space.

The North Louisiana Sanitarium, Shreveport, has completed its twenty-five room addition to its main building.

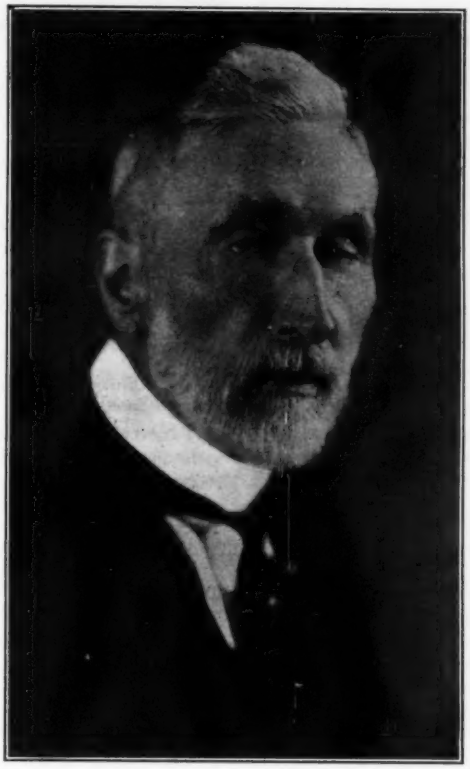
Dr. M. S. Ledoux, Shreveport, was elected secretary of Shreveport Medical Society, at its March meeting, vice Dr. E. Clay Edwards, who resigned, as he has moved to Monroe, to become Director of Ouachita Parish Hospital Unit.

Drs. R. G. Douglas and W. S. Kerlin, Shreveport, attended the recent clinical congress of the American College of Physicians at Cleveland, O.

DR. O'LEARY HONORED.

On the evening of January 29th a group of Shreveport doctors gathered around the festive board at the Washington Hotel, to honor one of their fellow-practitioners, who reached the age of eighty on the following day. Dr. F. S. Furman, who has practiced as one of Dr. O'Leary's

colleagues for over thirty years, and who, therefore, is fully capable of knowing whereof he speaks, presided as toast master. In addition, talks were made by Drs. Willis, Kimbell, Dickson, Ragan, Rougon, Bodenheimer, Boaz, Barrow, Herold, Hargrove, Knighton and others present; the gist of it all was that the testimonial was not because one of the members of the Shreveport Medical Society had reached the advanced age of four score years, but because such a man as Dr. O'Leary—one who had done so much good in such an unostentatious way, the friend of the high and the humble the rich and the poor, one whom every acquaintance calls "friend," and who, as far as is known, has no enemy or anyone to speak unkindly of him, a a veteran of the Civil War (serving when he was but a boy), and yet a great lover of peace, truly a "gentleman of the old school," yet progressive and up-to-date in his work — because such a man as this is still hale, hearty and active and good for many more years of practice the assembled crowd paid homage, rendered thanks and extended best wishes.



DR. J. F. O'LEARY

In addition to the banquet, attended by Dr. O'Leary and his son, a suitable remembrance was presented to the guest of honor, on behalf of those assembled, by Dr. Furman.

DR. MICHAEL F. MORVANT.

Dr. M. F. Morvant, coroner of Iberia Parish, died suddenly in his medical office in the town of Jeanerette, at 2:30 o'clock on the evening of February 16th. Dr. Morvant was a son of Mr. R. Morvant and was born on February 1st, 1887. When a young man, he took up the study of medicine and graduated in the Tulane Medical College some twenty years ago. Since that time he had been an active practitioner, enjoying the confidence of a large clientele. During the World War Dr. Morvant entered the army and was commissioned a first lieutenant, being placed in medical charge of an aviation corp. He was for a long time stationed in the State of Oregon. As soon as peace was declared he returned to his family in the town of his birth, and resumed his practice. Some six years ago he was elected Parish Coroner, which position he held until his demise. He leaves to mourn him, his wife, nee Elizabeth Dimitry, one daughter and young son.

The funeral was held at the church of his faith, St. John's Catholic Church, on Thursday evening at 4 o'clock in the presence of a large number of friends from all over South Louisiana. His wife and children and bereaved father have the sympathy of the community. The pall bearers were: Donald Burke, E. L. Chaney, Chas. W. Walker, A. Larroque, Whitney Romero and A. C. Bernard.

Dr. E. N. Landry, of New Iberia, was appointed Coroner in Dr. M. F. Morvant's place.

DIED: Dr. Hines C. Webb, Crowley, La. Dr. Webb was a graduate of the Louisville (Ky.) Medical College, 1889. He died at the age of 60 years, on November 21, 1926, as a result of carcinoma of the gallbladder and liver.

DIED: Dr. Augustus F. Gates, Hammond, La. Dr. Gates was a graduate of the Medical Department of Tulane University of Louisiana, 1898; he died at the age of 54 years, on Feb. 3, 1927, as a result of a cerebral hemorrhage occurring some time ago.

DIED: Dr. Gerasine Richard, Opelousas, La. Dr. Richard was a graduate of the Medical Department of the Tulane University of Louisiana, 1896; he died at the age of 55 years, on Feb. 1, 1927, as a result of cerebral hemorrhage.

REMOVAL: Dr. Theodore Dimitry, to Teresita Apartments, 4335 St. Charles, at Napoleon Avenue.

The regular bi-monthly meeting of the New Orleans Gynecological and Obstetrical Society will

be held Thursday, April 7, 1927, at 8 p. m., at the Mercy Hospital. The profession is invited to attend.

1. Hernia funiculi umbilicalis with report of three cases, Dr. A. F. Hebert.

2. The Kielland forceps, Dr. E. L. King.

3. Rupture of the uterus after Cesarean section occurring in the same patient twice within a year, a case report, Dr. M. J. Gelpi.

TUBERCULOSIS AND PUBLIC ASSOCIATION OF LOUISIANA.

February, 1927.

With the close of the 1926 Seal Sale we are pleased to give to the friends of the tuberculosis cause a gratifying report of the campaign.

Fourteen million five hundred thousand seals were distributed in Louisiana. A few of our parishes have not yet reported, and, to date, our gross receipts are $19,011.86; we expect to reach the $20,000.00 mark of last year. From an educational standpoint also, we are proud of the results of the past year's work.

Most generous support was given our campaign by the press, business houses and others. More literature and posters were distributed than in any previous year, and thru the co-operation of the General Outdoor Advertising Association, 50 billboard posters were placed gratis throughout the State.

Most generous response was received from the parishes in which a mail sale was carried through the State office, and returns are still coming in from this source.

Letters on the subject of observance of Tuberculosis Sunday were addressed to 759 clergymen.

There was an enthusiastic gathering at our Annual Meeting, which was held at the Louisiane Restaurant, New Orleans, on January 26th. The same officers, Board of Directors and Executive Committee were re-elected for 1927. On this occasion we were fortunate to have present Miss Nora Reynolds, Field Child Health Secretary of the National Tuberculosis Association, who delivered a splendid address on "Child Health Education." Miss Reyolds remained with us two days, during which she visited the Normal School and attended conferences in the interest of Child Health. We have arranged to have Miss Reynolds spend two weeks with us in April on a Child Health Crusade in Louisiana.

At the meeting of our Executive Committee, held February 4th, the following were, on recommendation, elected to membership on our Board of Directors: Rev. Arthur C. Evans, of Homer; Mr. A. H. Horton, of Coushatta; Mr. L. J. Babin, of Donaldsonville; Mr. B. C. Alwes, of Donaldsonville; Mr. Paul Canone, of Metairie Ridge; Mr. Allen Marsh, of Kenner, and Dr. D. L. Watson, of New Orleans.

At the same meeting, on recommendation, the following were elected to our Executive Committee: Dr. D. L. Watson, of New Orleans, and Mr. Allen Marsh, of Kenner.

Mr. F. D. Hopkins, Executive Secretary of the National, visited us for two days during the past month, consulting regarding the work of the past year and plans for the future. During his visit Mr. Hopkins addressed the Business and Professional Women of New Orleans, at a luncheon of that organization.

Mr. Jamieson Marshall, of the Institutional Advisory Service of the National, during a survey of Tuberculosis Hospitals throughout the country, visited our city; much helpful information was received from Mr. Marshall during his stay.

On March 31st, the fiscal year of the Association ends. Our books will then be audited and the Budget and Finance Committee will meet to arrange a budget and program for the year 1927. We are planning some intensive work in the State this year, and with the co-operation of our many interested friends and co-workers, we are looking for a banner 1927.

Our field organizer, Mrs. Fred C. Kolman, is again out in the field, looking into the local situations, giving her assistance in programs which our locals are preparing, and aiding in forming units of our Association.

The latest report from the United States Census Bureau shows that the greatest death rate in 1925 was from Heart Disease; Tuberculosis ranked fifth. In Louisiana the greatest death rate was from Heart Disease, Tuberculosis ranking third. There were 2,110 deaths from Tuberculosis in 1925.

Your attention is called to "Hygeia," which is probably the leading Journal of its kind in the world. It offers plain and practical information as to best methods for getting and keeping well. Subscriptions are $3.00 per year; 25 cents per single copy. It is published by the American Medical Association, 535 Dearborn Street, Chicago.

If you are not receiving the Bulletin of the National Tuberculosis Association, we will be glad to send in your name for their mailing list, upon request by you.

A very interesting study course has been prepared by the National in co-operation with

the Woman's Foundation for Health. It is recommended for Women's Clubs, Parent-Teachers' Associations, Y. M. C. A.'s, W. C. T. U.'s, churches and similar organizations. The purpose of the study is to bring to the individual, thru group study, the fundamental principles of health-building, and the simple facts one should know about various diseases. Carefully prepared outlines of study, with ample suggestions for leaders and teachers, are given. Write us concerning the course, its scope, cost, etc.

The New York Supreme Court has decided that the Tuberculosis Christmas Seal, with its twenty years of service in behalf of humanity in this country, has established for itself a place where it is entitled to monopolize the field and has restrained a new organization set up in New York. "The Association for the Relief of Tuberculosis Patients," which proposed to sell a similar seal, from using in any way, in connection with Tuberculosis, a cross in any form of design, or conducting a seal sale method of collecting funds or contributions of any kind.

ANNOUNCEMENT OF THE PLANS OF THE MEETING OF THE AMERICAN ORTHOPAEDIC ASSOCIATION.

Los Angeles—Clinical Day, June 11th.

Yosemite Valley—Regular Scientific Program June 13th, 14th and 16th.

San Francisco—June 17th and 18th.

Your President, Dr. James T. Watkins, and his colleagues of the Far West, especially the members of the Orthopaedic Clubs of Los Angeles and San Francisco, have formulated a most elaborate and attractive program for the entertainment of the members and guests of the Association. The plans in brief were issued as an extra leaflet mailed with the recent issue of the Journal of Bone and Joint Surgery, and all who have had a chance to read this announcement no doubt will make every effort to attend the meeting. It is probably safe to say that so fortunate an opportunity of seeing the glorious west may not again present itself in the lifetime of most of us, and it is therefore urged that all members and prospective guests of the organization plan their vacation accordingly.

It cannot be too strongly emphasized that our hosts must knew at an early date the approximate number in attendance so that proper provision may be made for transportation and for their comforts in general. Our hosts urge that we bring our wives. In writing Dr. Watkins be sure to indicate how many there will be in your party and the number of ladies in the party.

For the benefit of those who do not have access to Dr. Watkins' preliminary announcement an abstract of his prospectus is herewith included. Among the unusual inducements offered are:

Greatly reduced railroad rates west of Chicago, both coming and going.

A private train, "The American Orthopaedic Special."

Two days at the Grand Canyon of the Colorado with privilege of retaining cars and staterooms.

Parts of two days in Los Angeles. Arrangements have been made for a "close-up" of the inside workings of the movie industry, an opportunity very rarely accorded strangers.

Housing of all members and guests under the roof of some centrally located hotel.

The "Orthopaedic Special" leaves Boston June 4th, arriving at Los Angeles June 10th. Evening entertainment by Los Angeles Club. June 11th is a clinical day.

Private train leaves Los Angeles June 11th, arriving at Yosemite Valley at 1:15 p. m. Sunday, June 12th.

Parts of three days, June 13th, 14th and 16th, will be devoted to the regular scientific program. Ample provision is made for visiting the various great falls about the valley. "The moon will be right, the water by reason of the snow melting in the high Sierras, will be at their greatest volume." One whole day will be devoted to visiting the Mariposa Grove of Big Trees—Sequoia Gigantis, the oldest living things on earth.

Special train to San Francisco.

Entertainment of members and guests on June 18th and 19th by the San Francisco Orthopaedic Club.

The estimated cost for the round trip from Boston, the starting point of the special, is $388.84.

From San Francisco members can go straight home and be in Boston in 20 days from the time they started, or they can take any one of the three following scenic routes:

(1) Leave San Francsico June 19th over the Canadian Pacific Railroad, "avoiding the heat and prohibition", via Portland, with opportunity for the wonderful Columbia River drive, Seattle—Puget Sound trip, Vancouver—Fraser River sceneries—Lake Louise, Banff, Ft. Williams—Lake trip to Toronto, Thousand Islands—Montreal, Boston. Additional expense of this trip, exclusive of Pullmans and extra meals $26.00.

(2) Yellowstone Park trip additional five days at total cost of $54.00.

(3) Alaska trip. To Seward and back, 17 days, total additional expense, $156.00.

In a final word Dr. Watkins again urges us to bring our wives and explains that it will probably be a long time before our organization takes another trip to the coast. As soon as your wishes are known, railroad representatives will call on you to arrange schedules, and once on the train you will be looked out for without your having to worry about arrangements.

The trip will be made at very low cost and in the good company of your colleagues. All of which should be sufficient inducement for you to decide now to make the trip and thus show our brethren on the coast that we appreciate their unusual efforts and the welcome which they so cordially extend.

F. J. GAENSLEN,
Chairman of the Program Committee.

Marquette University College of Hospital Administration has announced plans for the holding of the Hospital Clinical Congress of North America the week of June 20 to 24, inclusive, in Milwaukee.

The Rev. C. B. Moulinier, regent of the College of Hospital Administration, in making the announcement stated that Marquette University has been working for some time preparing for the congressional exposition. The plan is to set up in the Auditorium in Milwaukee complete working exhibits of modern hospital equipment and demonstrate their use under actual conditions. It will be the first attempt to institute a "working" clinic, demonstrating the most modern advances in hospitalization.

There will be four distinct departments: Hospital, Public Health, Safety and Research. The Congress will be vitally interesting to all persons interested in hospitalization—hospital superintendents, staffs, trustees, nurse superintendents, engineers, architects, dieticians, those interested in safety, first aid industrial hospitalization, public health leaders, welfare workers, both public and private.

Dean John R. Hughes of the College of Hospital Administration of Marquette University, has announced two special courses in hospitalization. The first, a short course of ten days duration, will be held from June 6 to June 17. The second, a summer course of six weeks, starts on June 27, ending August 6. These courses are to be conducted by instructors who have been selected from the different fields of hospital endeavor from all parts of the country and include men and women who are acknowledged leaders in their respective fields.

This curriculum has been endorsed by the American Hospital Association, by the officers of the American College of Surgeons, by the American Medical Association, and is therefore acceptable to all the national associations interested in the greater efficiency of nursing and all other technical service to the patient in the hospital.

The short course, preceding the clinical congress and the summer course immediately following, offers an unusual opportunity in hospital education.

The detailed program for the Clinical Congress will be completed within a short time and ready for publication. Information on the short and summer courses can be secured from Dean Hughes.

UNITED STATES CIVIL SERVICE EXAMINATION.

The United States Civil Service Commission announces the following open competitive examination:

Junior Medical Officer (Interne)—Applications for junior medical officer (interne) must be on file at Washington, D. C., not later than June 30, 1927.

The examination is to fill vacancies in United States Veterans' Bureau Hospitals throughout the United States, and in positions requiring similar qualifications.

The entrance salary in the field service of the Veterans' Bureau is $1,860 to $2,400 a year, without allowances, of $1,260 to $1,800 a year with quarters, subsistence, and laundry, the entrance salary within the range stated depending upon the qualifications of the appointee as shown in the examination and the duty to which assigned.

The duties, under immediate supervision, are to admit patients, take histories, make physical and mental examinations and record findings; to make ward rounds of inspection, note charts, record observations; to prescribe for minor ailments or for acute or emergency cases and to dispense medicine in emegency; to perform minor surgical examinations and to assist at major operations and in redressing; to administer anaesthetic; to make routine laboratory tests and analyses; to assist at outpatient clinics in dressing and in administering vaccines; to keep records, make up case histories, answer correspondence relating to patients, and compile statistics requiring medical training.

Competitors will not be required to report for examination at any place, but will be rated on their education, training and experience.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D. C., or the secretary of the board of U. S. civil service examiners at the post office or customhouse in any city.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

J. S. Ullman, M. D., Associate Editor.

BIRTH REGISTRATION IN MISSISSIPPI REACHES HIGH-WATER MARK.

Since the establishment of the Bureau of Vital Statistics of the Misssissippi State Board of Health on November 1st, 1912, birth registration in the State has had its ups and downs, as one may see at a glance at a chart recently made which portrays registration of births from the year of 1912 until the end of the year 1926. Strange to say, the greatest "down" began with the very first year of Registration, and there was a steady and rapid descent from 41,000 births registered in 1913 to 37,000 registered in the year 1917. Between the year 1917 and 1921 there was a rapid rise in registration and the State was admitted into the U. S. Registration Area for Births after having registered 46,500 births in the year 1921. Then began another decline until the end of the year 1923, when there was a registration of a little over 43,000 births. During the past three years we are glad to note that the line on the chart rose rapidly until the high figure of 50,000 and more births were turned in for the year 1926.

Last year, the Bureau of the Census published figures showing that in 1925 Mississippi had the third highest birth rate in the Registration Area. We feel confident that with the great increase shown in 1926 over the year 1925 Mississippi will show the highest birth rate in the United States.

During the past three years four new factors have been inaugurated by the Bureau which have increased the interest in birth registration throughout the State of Mississippi, and no doubt are in a great measure responsible for increased registration:

1. Each new mother has been presented with an attractive certificate showing that her baby has been registered, and explaining the reasons why each birth should be recorded.

2. Much information has been disseminated through the press and through other agencies showing the importance of registration.

3. Field men have been sent out into the State to check registration and to make indictments against those who are neglecting their duty in the matter of recording births and deaths.

4. A check by the Bureau of the Census to decide whether or not Mississippi is to retain its place in the Birth and Death Registration Areas has greatly stimulated all agencies concerned in the registration of births and deaths in the State.

We might add also that the results of the recent war have indirectly stimulated the necessity of birth and death registration on account of a large number of disabled veterans who have been required by the War Department to furnish certified copies of birth and death certificates in order to strengthen their claims for compensation.

Vicksburg, the historic city, is looking forward with great pleasure to the entertainment of the members of the Mississippi State Medical Association in May. We hope to have much larger attendance than in 1923. It will be remembered that at that time there was registered one of the largest meetings the Association ever held.

In addition to the regular scientific program, many other forms of entertainment are being planned; a boat ride on the river and refreshments and entertainment while on the ride; numerous sight-seeing trips over the National Military Park, to be arranged at convenient hours, throughout the three days of the meeting; afternoon teas and other parties for the ladies; reception at the Country Club and a dinner dance at the Country Club for all members and their ladies.

The courtesies of the B'Nai Brith, the Elks, the Country Clubs, and of the Knights of Columbus, and the Young Men's Christian Association will be extended to visiting doctors and their wives.

Clinics will be held in each of the local hospitals each morning from seventy-thirty to nine-thirty, to which all members are invited.

Scientific and Commercial exhibits will be placed in the lobby of the Y. M. C. A.

The general scientific session will be held at the Y. M. C. A. The ear, eye, nose and throat section will meet at the auditorium of the Carnegie library. The evening session to which the public is invited will be held in the auditorium of the Carr Junior High School.

Committees for Arrangement for State Association Meeting.

General Chairman—Dr. George M. Street.

Clinics—Dr. W. H. Parons, Chairman.

Commercial Exhibits—Dr. S. Myers, Chairman.

Scientific Exhibits—Dr. E. F. Howard, Chairman; Dr. H. I. Gosline.

Convention Halls—Dr. B. B. Martin, Chairman.

Hotels and Rooms—Dr. J. A. K. Birchett, Sr.,

Chairman; Dr. A. J. Podesta, Dr. D. A. Pettit, Dr. J. A. K. Birchett, Jr

Registration—Dr. L. J. Clark, Dr. E. F. Howard.

Reception and Welcome—Dr. H. H. Haralson, Chairman; Dr. H. W. Weimar, Dr. D. S. Smith, Dr. D. P. Street, Dr. G. Y. Hicks, Dr. L. J. Clark, Dr. L. S. Lippincott.

Finance—Dr. S. W. Johnston, Chairman; Dr. I. C. Knox, Dr. A. Street, Dr. H. H. Haralson.

Entertainment—Dr. I. C. Knox, Chairman; Dr. G. P. Sanderson, Dr. C. J. Lewis, Dr. S. J. Harper, Dr. L. S. Lippincott.

A special effort is to be made to have a large and interesting scientific exhibit this year at the meeting of the State Association, and the Committee is inviting all members to place exhibits on subjects in which they are interested and have done special work.

Dr. D. S. Johnson, Health Officer of Hinds County, has been at the Mississippi State Sanatorium for several weeks taking the course offered in Diagnosis of Disease of the Chest which is being offered to the physicians of the State through the courtesy of the Board of Trustees of this institution.

Hinds County is one of the counties which makes special arrangements at all time that their health officer may avail himself of any opportunity which will make for a better condition of health in the county.

Dr. W. S. Polk of Union, and Z. E. Crawley of Sumrall, are also availing themselves of the advantage of this course at Sanatorium.

Numerous requests for information regarding this course have come from various sections of the State, and so hearty has been the response from the physicians of the State that it is estimated that the schedule will be entirely filled at Sanatorium by an early date.

All at Sanatorium sympathize with Dr. B. B. O'Mara in the very recent tragic death of his wife, Mrs. Mamie Gray O'Mara.

The South Mississippi Medical Society at its recent meeting in Hattiesburg elected the following officers: President, Dr. A. M. Harrelson, Stringer; vice-president, Dr. J. G. Gardener, Columbia; secretary-treasurer, Dr. R. H. Foster, Charity Hospital, Laurel.

The following program was announced for the March meeting held in Laurel:

"Diagnosis, Treatment, and Management of Malaria," Dr. C. C. Bass, New Orleans, La.

"Gonorrhoea in Women," Dr. H. W. E. Walther, New Orleans.

"Disabilities of the Hip," Dr. F. H. Hagaman, Jackson.

"Legal Medicine," Hon. Ellis Cooper, Attorney, Laurel.

"Dentistry and Medicine," Dr. G. F. Haynes, Dentist, Laurel.

"Reminiscences of a Jones County Doctor," Dr. J. R. Kittrell, Laurel.

Dr. J. R. DeVelling of Laurel has moved away but has not yet announced his future location.

The Laurel Infirmary has been closed.

The new Methodist Hospital at Hattiesburg is about complete and will shortly be opened.

Dr. W. W. Crawford of Hattiesburg has recently recovered from a severe illness and is quite well again.

The Issaquena-Sharkey-Warren County Medical Society at its regular meeting, Tuesday, March 8, presented the following program:

"Laboratory Service in a Civilian Hospital," Dr. H. I. Gosline.

A paper, Dr. A. J. Podesta.

"X-ray Diagnosis of Gall Bladder Diseases" (Illustrated), Dr. G. M. Street.

"Discussion of Medical Ethics," Dr. E. F. Howard.

Reports were made by the committees having in charge the coming meeting of the State Medical Association on May 10-11-12.

The Tate Medical Society announces the following officers for the year: President, Dr. Wm. R. Gilbert, Yazoo City; vice-president, Dr. W. D. Smith, Senatobia; secretary and treasurer, Dr. J. S. Eason, Coldwater.

The Central Medical Society at its February meeting had papers read by Drs. Day and Raner

of Yazoo City, W. W. Davis of Pelahatchia, and G. W. F. Rembert, Jackson.

Dr. G. W. F. Rembert and Dr. N. C. Womack attended the meeting of the American College of Physicians at Cleveland, Ohio.

The Central Medical Society appointed a committee to attend the next meeting of the Warren County Medical Society at Vicksburg to offer assistance in arranging for the meeting of the State Association.

WHY EVERY DEATH SHOULD BE REGISTERED PROMPTLY.

That there may be available, complete and accurate information as to deaths of all human beings, with dates of deaths and causes of deaths, to the end that preventable causes of death may be eliminated and human life lengthened;

That the settlement of pensions and life insurance may not be delayed from the lack of proper evidence of the fact and the cause of death;

That titles and rights to inheritance may not be jeopardized by the failure of records;

That the courts and other agencies may be supplied with certificates of death, or certified copies, to establish necessary facts;

That all health agencies—national, state, municipal and private—may know immediately the causes of death that they may act promptly to prevent epidemics;

That the success or failure of all measures attempted in the prevention of diseases may be accurately determined;

That individual cities and localities may learn their own health conditions by comparison with other communities and determine thereby the wise course of public health activity;

That the homeseekers and investors may be guided in the selection of safe and healthful locations.

A prompt report of a death is more apt to be an accurate record than a report that is delayed. The law requires that a death certificate be filed with the local registrar and a burial or removal permit obtained from the registrar before any disposition is made of the body.

BOOK REVIEWS

Pernicious Anemia: By Frank A. Evans, M. D. Baltimore: Williams & Wilkins Co. 1926.

This little books represents a very satisfactory and adequate review of a puzzling and up to now hopeless condition. The author draws from his own rich experience as well as from that of others in his analyses of cases upon which he suggests conclusions as to diagnosis, prognosis and treatment.

It is unfortunate that the recent experiences of Minot and Murphy, *et al.*, in producing encouraging improvement in cases of pernicious anemia by the use of the high protein diet were published too late to be included in so excellent a book as this one. If the promises at present held out by this mode of treatment prove to be well founded, we may expect a new series of investigations which may lead to a better explanation of the disease and thus to even more promising results. If this should be the case, subsequent editions of Dr. Evans' book will be extended to include them.

I. I. LEMANN, M. D.

Recent Advances in Physiology: By C. Lovatt Evans, D. Sc. (Lond.), M. R. C. S., L. R. C. P., F. R. S. (Second edition.) Philadelphia: P. Blakiston's Sons & Co. 1926.

This book is characterized by its author as "an elementary text-book of *advanced* physiology," and deals, as its title implies, with those branches of the subject in which, during recent years, most interest has been taken and the greatest advances have been made. Although intended primarily for the student who has completed an ordinary course in physiology and who desires a more thorough knowledge in that field, it should also prove of exceptional value to the physician who wishes to find a not too lengthy account of particular phases of the subject. The reviewer knows of no volume which presents, in a few pages, so much physiology, at once so clearly, briefly, and authoritatively.

The chapters dealing with the blood should prove useful to the physician. In addition to a discussion of the cellular elements, of the transport of gases, and of the buffers of the blood, the author includes brief descriptions of certain recent methods, *e. g.*, for the determination of the relative volumes of the corpuscles and plasma, for the hydrogen ion concentration of the blood, and for bilirubin.

Perhaps the most valuable chapter from the physiologist's viewpoint, is that upon the conditioned reflexes. It is a section which may also prove of interest to the psychiatrist. Much of the original literature on the conditioned reflexes has never been translated from the Russian, and Professor Evans was fortunate, in the preparation of this chapter, in securing the co-operation of Dr. Anrep, a distinguished pupil of Pavlov. More intimate knowledge of this work of the Russian school, taken in conjunction with the work of Henry Head, may ultimately render intelligible the physiological mechanisms of certain psychotic states, and dispel much of the repugnance which some may feel toward "psycho-therapy,"—a repugnance largely engendered by the putative vagueness of the psychological conceptions. The interested reader should also consult "Instincts and the Unconscious," by W. H. S. Rivers.

Professor Evans chapters upon tissue oxidations and muscular contraction will scarcely interest the medical practitioner; his discussion of the mechanisms of postural reflexes and of the functions of the labyrinth may be more pertinent; while his exposition of our knowledge of insulin and its action should be considerable value.

The discussion of the output and work of the heart contains little which is likely to be of immediate clinical interest. The chapter on the capillary circulation, on the other hand, should repay study. Among other things, it includes the evidence upon which Krogh's demonstration of the independent contractility of the capillaries is based; some of the consequences of this contractility as related to haemodynamics; and a very brief discussion of surgical shock. Unfortunately Professor Evans' book was published too early to incorporate the recent observations of Anrep and Segall upon the nervous control of the coronary circulation. These authors found, in a series of exceptionally well-controlled experiments, that, in the dog at least, and contrary to some previous evidence and rather general opinion, the constrictor fibers to the coronary vessels lie in the vagus; the dilators in the sympathetic. The bearing of this finding upon sympathectomy in angina pectoris is evident.

RICHARD ASHMAN, M. D.

Materia Medica and Therapeutics, Including Pharmacy and Pharmacology: By Reynold Webb Wilcox, M. A., M. D., L.L. D. (Eleventh edition.) Philadelphia: P. Blakiston's Son & Co. 1927.

The eleventh edition of Wilcox's book on materia medica and therapeutics follows much the same general characteristics as previous editions and maintains the same high standard of excellence. As the book is made up, there are but few faults

to find with it. It does seem, however, that the necessity for such a book does not exist nor should there be the same call for it as at the time the first edition appeared, so fundamentally has the concept of the teaching of materia medica, pharmacology and therapeutics changed. Several hundred pages devoted to the description of drugs seem to the reviewer unnecessary for a student text-book on therapeutics. It seems a waste of time and energy to require or to expect the overburdened student to learn the description, source and purities of a very large number of drugs of which, at most, he will use a very small per cent in his practice and of this small number he will use, it is extremely doubtful if he will ever become familiar with the general characteristics of most of them. How much better it would be to teach the pharmacology of a few drugs of known definite therapeutic value than to attempt to cover the whole field of materia medica, therapeutics, pharmacy and pharmacology.

J. H. MUSSER, M. D.

The Surgery of Gastro-Duodenal Ulceration: By Charles A. Pannett, B. Sc., M. D. (Lond.), F. R. C. S. (Lond.). London, Oxford University Press 1926.

This treatise is placed before the reader to give the author's personal experience and results with the treatment of gastric and duodenal conditions. Acute conditions are only mentioned in passing, as to occurrence, when and where found.

The initial chapter deals with pathology, showing the macro- and microscopical findings in gastric and duodenal ulcer, as also the relation of carcinoma to gastric ulcer. The author speaks of etiological factors, *i. e.*, disturbed innervation, vascular changes—bad innervations and infections, all capable of producing ulcers, but not characteristic as the true ulcers.

Under the heading of symptomatology, both ulcers are discussed with reference to pain (mechanism), test meals and x-ray interpretation.

Dealing with treatment, gastric ulcer is discussed in general. Principles that are advocated are first, thorough medical treatment sought before surgical intervention; second, if exploration is decided upon, thorough search of the stomach, as ulcer in early stage may be overlooked.

The surgical intervention is based on two principles: First, altering the physiological condition of stomach so the tendency to heal is influenced; second, excision of ulcer. The first class includes gastro-jejunostomy and jejunostomy. The second class includes the various methods of partial gastric resection. The explanation of relief from gastro-jejunostomy is explained in the reduction of acidity or alteration in the mechanism of the stomach. Pyloroplasty (the two methods, Heinecke, Mickulicz and Finney) are devised to set aside the sphincter action of the pylorus. Jejunostomy is mentioned in this chapter, but is discussed at length in another. Local wedged-shaped excision is shown to have its disadvantages in disturbance of motor function (innervation).

Under the heading of excision of pyloric region of stomach the several methods are discussed as follows:

Pean's or Billroth I: Resection of pylorus with axial union of duodenum, open end of stomach partially closed.

Billroth II: Pylorectomy, plus a gastro-jejunostomy.

Moynihan, or a modified Polya: End of duodenum closed, open end of stomach anastomosed with lateral duodenum.

Chapter five deals with treatment of gastric ulcer, indications and results of particular operative procedures, followed by a discussion of gastro-jejunostomy as to mortality. The author claims that gastro-jejunostomy is the operation of choice in inexperienced hands and in ulcer near the pylorus, but the majority favors excision in ulcer elsewhere in the stomach. Pyloroplasty is again discussed, quoting Grey Turner for the year 1912 and also Horsley, Finney and Friendenwald. Gastric resection is next considered, naming its advocators and their reasons therefor. Foremost wedged-shaped excision alone gives only temporary relief. Walton combines wedged-shaped excision with gastro-jejunostomy. The Balfour operation (excision with cautery plus gastro-jejunostomy) and the sleeve resection are discussed with their advocates and statistics. Under the heading of removal of pyloric segment the operations, as the Pean, etc., are again gone into.

The next subject is the treatment of hour-glass stomach. The summary of the chapter deals with the author's experience in treating 44 cases of gastric ulcer.

Chapter six is devoted to the surgical treatment of duodenal ulcer; as in the case of gastric ulcer, a fair medical trial is advocated at the onset. In considering surgical intervention, those favoring gastric jejunostomy are Moynihan, Sherrin, Walton, Balfour, etc., and those advocating partial duodenectomy are Finisterer, Van Haberer, Clairmont and Novak.

The late symptoms following a gastro-jejunostomy for duodenal ulceration are cited as due to: (1) Persistence of original ulcer; (2) hemorrhage;

(3) perforation; (4) gastro-jejunal ulcer. The remainder of the chapter gives the percentage mortality of both procedures. When the lesions are extensive it is advisable first to try a gastro-jejunostomy and sometimes a jejunostomy, if these fail, then a resection according to the method of Finsterer is advisable. With regard to perforation of duodenal ulcer, the age (20-40), location (anterior wall), size (small), then the clinical features, localization of inflammatory process and the treatment are reviewed. Statistical study favors operation, with perforation, within the first twelve hours, though after twenty-four hours, prognosis improves somewhat, explained by the temporary plugging of the hole. The methods of operation are simple suture or plus suturing omentum over wound, suture plus gastro-jejunostomy and resection of perforated ulcer.

The chapter that follows includes hemorrhage, its source, clinical features and treatment. Many authorities, as Sherren, Finsterer recommend immediate intervention after the primary shock has passed.

Chapter IX discusses technique of operation, *i. e.*, prepartion of the patient, anesthesia and different types of operative technique. Pannett prefers general anesthesia, on the grounds of the uncertainty of local analgesia. The preferred incision in the abdominal wall and in the stomach, and the suture material are also brought into this chapter. The sleeve resection of the stomach Pean's and Moynihan's operations and duodenectomy technique are described with a concluding paragraph on post-operative care.

The concluding chapter deals with post-operative complications, as: chest complications (pneumonia, massive collapse of Pasteur); hemorrhage; vomiting (anesthetic, viscous circle, strangulation of anastomosed loop, obstruction of outlet of stomach in Pean's operation and acute dilatation of stomach); internal hernia; separation of the viscera; diarrhea; gastro-jejunal ulcer; injury of bile and pancreatic ducts in duodenectomy.

In discussing gastro-jejunal ulcer, several authorities are quoted as to the percentage of occurrence (2-18%). The method of treatment advocated depends on whether the primary duodenal lesions are healed. If so the anastomosis is released, stomach and jejunal openings closed, and the intervention is completed with a pyloroplasty. If the lesion is not healed, a Polya operation is advised.

The book is a complete resumé of the surgery of gastric and duodenal ulcer with a tendency to as conservative radical surgery as is possible for the patient's permanent cure.

EMILE BLOCH, M. D.

Transfusion of Blood: By Henry M. Feinblatt, M. D. Illustrated. New York, The Macmillan Company. 1926.

This volume, the first of its kind devoted entirely to blood transfusion is, as its author intends it, a critical survey of the subject. It is a thorough, composite treatise beginning with an historical resumé and containing separate chapters on the physiology of the blood, the blood groups, indications, dangers and untoward results, methods, auto and exsanguination transfusion and the transfer of blood in children.

The subject matter is presented in a clear, easily readable manner and the text is conveniently arranged for reference. This valuable therapeutic accessory is brought from its earliest conception to its present day efficiency: a description is given of the more accepted methods with comments on their respective merits and shortcomings. The chapter on untoward results is particularly illuminating as well as the one on indications which in recent years have become more numerous and diversified.

The book is of unquestionable value, particularly to surgeons, although the internist will find much of interest in its pages.

WALDEMAR R. METZ, M. D.

Manual of Normal Physical Signs: By Wyndham B. Blanton, B. A., M. A., M. D. St. Louis, C. V. Mosby Co. 1926.

This would serve as a splendid index to the study of physical diagnosis, if this is the author's intention. The subjects dealt with are for the most part enumerated and no attempt is made to go into detail. As a result, very important points are omitted. The book is written in a very simple and easily comprehensible style. There are some excellent paragraphs of topographical anatomy contained in the volume.

HAROLD ABEL BLOOM, M. D.

Pediatric Nursing: Including the Nursing Care of the Well Infant and Child: By Gladys Sellew, M. A., B. S., R. N. Illustrated. Philadelphia and London, W. B. Saunders Company. 1926.

Miss Sellew's book on pediatric nursing is the most valuable contribution that has been made to the literature of nursing for the past several years. It is written by a nurse, from the nurse's standpoint, and is destined to become the standard text-book on the subject in schools of nursing. The author's twenty year's experience as nurse and social worker has given her an excellent groundwork on which to prepare the book.

The text is divided into two parts. Part I is devoted largely to the hygiene and care of the well infant and child and the subject is presented in a concise and well-written manner that will relieve the mind of many a weary general practitioner and fond mother. Part II contains sixteen chapters on nursing procedures and it teems with necessary and useful information, brought up to the minute and offered in a readily accessible form. Miss Sellew has wisely made free use of bold-faced type and italics in designating her paragraphs, and sub-sections. The book is of convenient size and not too long; the subject is covered in 435 pages.

FRANCIS M. MUNSON, M. D.

Medical Gymnastics and Massage in General Practice: By Doctor J. Arvedson. Translated and edited by Mina L. Dobbie, M. D., B. Cr. 2d ed. Philadelphia, P. Blakiston's Son & Co. 1926.

This book does not appeal to one as a textbook for ordinary use among students, either of medicine or of physical therapy. It is far too advanced a book for any to use except those who are graduates, and especially those who are graduates in medicine. As a book on medical gymnastics and massage, it goes too much into detail as regards pathology and therapeutic treatment. One would have to be a graduate in medicine fully to appreciate the many details describing the various diseases, before the massage treatment is taken up. The recommendation which is made in several instances of "massage over the joints," in my opinion, should be condemned, especially of those cases of arthritis or other inflammatory disease. It is a well known fact that massage over joints increases the irritation and, therefore, aggravates the disease. This is especially true in chronic arthritis.

The various remedial exercises are not described in detail and are very hard to understand, even by those who are versed in such exercises. This appears to be a very great objection to the book, as the reader must refer to Kleen's massage and medical gymnastics in order to understand the details of these exercises.

A further objection to the book is the fact that it offers massage and medical gymnastics as a panacea for almost every known disease. It is certain that in many of the diseases taken up the treatment outlined would surely not relieve the condition, and, in all probability, would increase the symptoms. The book undoubtedly contains a great deal of valuable information, but does not appeal as one which should be recommended to any except those who are very far advanced in physical therapy and are, therefore, capable of selecting the valuable suggestions offered.

JOHN T. O'FERRALL, M. D.

Physiology and Biochemistry in Modern Medicine: By J. J. R. Macleod, M. B., LL.D. Aberd.), D. Sc. (Tor.), F. R. S. 5th ed. St. Louis, C. V. Mosby & Co. 1926.

Anyone who has ever heard Dr. Macleod present a subject at a medical meeting, would expect him to perform only a thorough and competent test, and as an example of intelligent book writing, this last revision of this standard text-book is par excellence.

Physiology is still replete with theories, but unless we at least hold a tenable theory, a great deal of our modern diagnosis and therapeutics would have to be considerably altered. Dr. Macleod presents each side of every question briefly and clearly, but like a true teacher invariably ends each discussion with a well-digested theorem of his own, which he would recommend to his students as the *most probable explanation.* He thus avoids leaving you with a number of partly dissociated ideas to choose from. In this connection the number of references given at the end of each chapter is noteworthy.

Physiology is something more than mere biochemistry. It has struck me rather forcibly that some of the other texts on physiology should be relabelled "bio-chemical reactions."

As is also to be expected, the chapters on digestion, assimilation and nutrition are particularly replete with up-to-the-minute information. It would pay an internist to read the latest ideas and discoveries quoted briefly and clearly here. Insulin and its mode of action and over-action are beautifully portrayed. The sections on cardiovascular disturbances, basal metabolic changes and the physiology and chemistry of shock are likewise thoroughly handled.

Thus, the entire book seems to be written by a physician and for a physician, with the practical application of every physiologic fact stressed, even to the proper technic and when to administer oxygen to the pneumonia patient.

F. M. JOHNS, M. D.

Psychological Healing: A Historical and Clinical Study: By Pierre Janet. Translated from the French by Eden and Cedar Paul. In two volumes. New York, The Macmillian Company. 1925.

Professor Janet's treatise is interesting, practical and timely. The study is presented against

an historical background in a manner that makes it useful to the busy practitioner and to the teacher of clinical medicine. He discusses miraculous healings, medical moralization and philosophical methods of treatment, including under the latter heading a dispassionate exposé of the charlatanism of Mary Baker Eddy and "Christian Science." The chapters on suggestion and hypnotism and on rest and isolation make interesting reading for the physician and for the layman.

FRANCIS M. MUNSON, M. D.

Cavernous Sinus Thrombophlebitis and Allied Septic and Traumatic Lesions of the Basal Venous Sinuses: A Clinical Study of Blood Stream Infection: By Wells P. Eagleton, M. D. New York, The Macmillan Co. 1926.

This monograph, written much in the style of Eagleton's monograph, "Brand Abscess," emphasizes the clinical phase of the subject, and particularly, he says, the following considerations in the diagnosis and treatment of infective cavernous sinus disease:

"(1) If the diagnosis is to be made early, which it must be, if the surgical attack is to have slightest chance of success—cavernous sinus phlebitis should be regarded as a group of diseases.

(2) For early diagnosis it must be appreciated that the classical symptoms of exophthalmos, edema of the lids, and chemosis may or may not be present, depending on whether the sinus is suddenly and completely obstructed by an acute septic process, or gradually obliterated by a compensatory thrombus.

(3) An early diagnosis in the cases of slow involvement without classical manifestations of exophthalmos (the most promising type for surgical intervention) necessitates a careful study of the following mechanical factors which determine the symptomatology:

(a) The path of entrance of the infection into the sinus.

(b) The part of the sinus first attacked; and

(c) The alterations in the adjacent tissue that occur as a result of the venous anastomosis of the sinus.

(4) The necessity of treating the phlebitis not only by drainage, but by placing the inflamed venous radicle at rest by ligation of the common or internal cartoid artery."

Case histories of 38 cases are given and 25 of these were observed personally by the author. Twenty-one of the author's cases were fatal and from these, twelve autopsy reports are included. Four cases recovered, three of which were verified by operative findings although apparently in only one was the cavernous sinus actually opened at operation.

The reader would have a much clearer mental picture of cases if the ages of patients had been included in the histories.

Serum therapy and vaccine therapy are discussed. In transfusion the author attempts to add specific properties to the blood by immunization of the donor either by the use of stock vaccines or, when time permits by the use of an autogenous vaccine from the patient.

An extensive bibliography is appended. The author has decidedly made a contribution to the study of vascular disease.

H. KEARNEY, M. D.

PUBLICATIONS RECEIVED.

D. Appleton & Company, New York: "A Textbook of Bacteriology," by Hans Zinsser, M. D. "Preventive Medicine and Hygiene," by Milton J. Rosenau.

W. B. Saunders Company, Philadelphia and London: "Health Supervision and Medical Inspection of Schools," by Thomas D. Wood, A. M., M. D.

P. Blakiston's Son & Co., Philadelphia: "Clinical Neurology," by Prof. Dr. Hans Curschmann, translations with changes and additions by Edward A. Strecker, A. M., M. D., and Milton K. Meyers, B. S., LL. B., M. D.

J. B. Lippincott Company, Philadelphia and London: "Four Thousand Years of Pharmacy," by Charles H. LaWall, Ph. M., Phar. D., Sc. D., F. R. S. A. "International Clinics," Vol. 1, thirty-seventh series 1927.

Lea & Febiger, Philadelphia: "Modern Medicine," edited by Sir William Osler, Bart., M. D., F. R. S., re-edited by Thomas McCrae, M. D. Vol. IV. "Mineral Waters of the United States and American Spas," by Wm. Edward Fitch, M. D.

The MacMillan Company, New York: "The Modern Practice of Pediatrics," by William Palmer Lucas, M. D., L.L. D.

The Williams & Wilkins Company, Baltimore: "Outlines of Common Skin Diseases," by T. Caspar Gilchrist, M. D.

Miscellaneous: "Proceedings of the 19th and 20th Conferences of the American Association of Medical Milk Commmissions." "This Business of Operations," by James Radley, with foreword by J. M. Withrow, M. D. "Early Days of the Presbyterian Hospital in the City of New York," by David Bryson Delavan, M. D. "Saving Eyesight after Mid-Life," by John Herbert Waite, M. D., S. M.